

**BOARD OF HIGHER EDUCATION**

**REQUEST FOR COMMITTEE AND BOARD ACTION**

**COMMITTEE:** Academic Affairs

**NO.:** AAC 21-15

**COMMITTEE DATE:** June 15, 2021

**BOARD DATE:** June 22, 2021

---

**RECEIPT OF THE OPEN EDUCATIONAL RESOURCES (OER) ADVISORY COUNCIL IMPLEMENTATION GUIDELINES ON COURSE MARKING & OER KEY PERFORMANCE INDICATORS**

**MOVED:** The Board of Higher Education receives both the OER *Course Marking Implementation Guidelines* in furtherance of the Board's short-term recommendations, outlined in AAC 20-03 and adopted on October 22, 2019; and the OER *Key Performance Indicators* recommendations from the OER Advisory Council.

The Board thanks the members of the OER Advisory Council and specifically the OER Course Flagging Committee and DHE lead staff Robert Awkward, Ph.D. for their work.

The Board directs the Commissioner to work with the OER Advisory Council and the institutions of public higher education to implement the attached *Course Marking Implementation Guidelines* and *OER Key Performance Indicators* and report back on implementation progress next year. In addition, the Board further directs the Commissioner or his/her designee to periodically report to the Board on the Department's progress in this regard.

**VOTED:** Motion adopted by AAC 6/15/2021; adopted by BHE 6/22/2021.

Authority: M.G.L. c. 15A, §9 (c) and (u); AAC 20-03.

Contact: Patricia A. Marshall, Ph.D., Deputy Commissioner for Academic Affairs & Student Success  
Robert J. Awkward, Ph.D., Assistant Commissioner for Academic Effectiveness

# **Course Marking Implementation Guidelines and OER Key Performance Indicators Massachusetts Public Higher Education**

## **Background**

The effort to establish a system for identifying the open educational resources used in OER courses – both free and low-cost resources – throughout public higher education is being pursued, in part, because the Massachusetts Board of Higher Education voted unanimously on October 22, 2019 (AAC-20-03), to adopt this recommendation and encourage its implementation. The Board adopted the recommendation that, “OER courses should be designated in the course management systems for all public higher education so that the use of OER may be encouraged by faculty and students, and tracked and reported.” (AAC 20-03).

Course marking, further discussed below, is an essential component both in implementing the Board’s recommendations, and the Board’s Equity Agenda, especially for minoritized students through the widespread adoption of OER, which in turn has the capacity to:

- reduce the costs of course instructional materials (the third highest cost for students after tuition and fees and room and board)
- address issues of inequity
- increase affordability
- improve student learning
- ensure all students have access to learning materials on the first day of class
- improve student success (i.e., persistence and completion)

The designations outlined in the *Course Marking Implementation Guidelines* (the “Guidelines”) (see Attachment A) distinguish between free/no cost and low-cost course instructional materials. Furthermore, the Guidelines clarify what is not OER instructional materials, e.g., inclusive access. The Guidelines also summarizes best practices for implementing course marking based on the experiences of ten Massachusetts public institutions, and the experiences of institutions of higher education in select other states that have already adopted course marking. In addition, over the course of this past year, work evolved regarding the need to assess the effectiveness of OER across public higher education in a systematic manner. Thus, the OER Advisory Council is now recommending the adoption of *OER Key Performance Indicators* (see Attachment B) as well.

## **What is Course Marking?**

*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).

The Higher Education Opportunity Act (HEOA) of 2008 requires publishers to disclose certain information about textbooks and supplemental materials to faculty members as they decide what books to require. Publishers must disclose: (1) the textbook’s price, in all its available formats (i.e., paperback or unbound), (2) the copyright dates of the textbook’s three previous editions, and (3) the substantial content revisions made between the book’s current and previous editions. A logical extension of this federal requirement would be to designate OER courses in institutional course management systems.

Designating no and low-cost instructional course materials will serve the same purpose, which is to inform students of textbook costs before they enroll.

The development of the Guidelines will provide necessary guidance for how institutions can identify which courses are OER in their respective course management systems. This additional information will encourage students to enroll in these courses by enabling students to be able to identify by course type: those that are OER (i.e., free), those that are low-cost (i.e., cost \$50 or less), and those that will use traditional textbooks. As already mentioned, this new practice of course marking will empower students to make informed decisions regarding the cost of course materials during the enrollment process. It will also encourage faculty to select OER materials – if they believe it is the best alternative for students. Ultimately, course marking will play an important role in meeting the demand of students for free and low-cost instructional materials and lead to increased persistence and success.

Finally, another benefit of adopting course marking is that it will enable institutions to systematically assess the effectiveness of OER on reducing student costs and increasing measures of student success. Accordingly, the *OER Key Performance Indicators* are also recommended by the OER Advisory Council, which will support campuses' tracking, measurement, and assessment of the costs, outcomes and impacts of OER on student learning, equity, and completion.

## **Preamble**

The OER Advisory Council, through the leadership of the OER Course Flagging Committee, developed the Guidelines. The purpose of this document is to provide guidance to Massachusetts' public higher education institutions based on experiences and best practices gleaned from the ten Massachusetts public institutions that have already developed course marking systems; as well as the Washington (State) Community and Technical Colleges System and the Community College of New Hampshire, both of which have published similar guidelines. It is important to note that these are recommendations, not requirements, in recognition that each institution is unique and must develop, adopt and adapt this higher education practice based on its own unique culture, faculty, students and resources.

Designating a course as OER within a course marking system should be included among the other elements employed by public institutions of higher education to address equity, student success, and completion. Implementing and maintaining a course marking system will require an investment of time and resources for each institution, but the data suggest that the return on this investment, in terms of revenues from increased enrollments and improved retention, will be significant. Further, in two key measures of enrollment intensity, which is an indicator of student progress toward graduation, students in courses that used OER enrolled in significantly higher numbers of credits the next semester than students in courses with commercial textbooks (Fischer, Hilton, Robinson, & Wiley, 2015).

## **Instructional Materials Defined**

Throughout the guidelines, the use of the term *Instructional Materials* (i.e., teaching and learning materials) is defined as:

- Textbooks, eBooks, websites, software programs, apps, courseware packages, access codes to homework sites

*Instructional Materials* do not include:

- Tools and supplies cost, such as lab coat, goggles, notebook paper, art materials, thumb drives, or calculators
- Auxiliary fees such as lab fee, technology fee, or eLearning fee
- Inclusive Access of First Day programs

The OER Advisory Council members have concerns with the rising costs of non-instructional materials, and a desire to provide transparency and equity for students. While the scope of these guidelines does not address this topic, Council members have recommended that institutions also consider providing transparency when it comes to these costs. A description of the OER descriptions are below:

***OER/No Cost/Library Resources:*** *No textbook to purchase, no cost for students*

Type Description

The required instructional materials are provided online at no cost (i.e., free). An optional printed version and some supplementary course instructional materials may be available for purchase. This designation includes Open Educational Resources, No Cost, and Library Resources. Institutions may elect to separate the designation types to provide specificity to students. For the purposes of these guidelines, we have combined the types of no cost instructional materials.

***Low-Cost*** (*\$50 or less*):

Type Description

The required instructional materials cost \$50 or less.

### **Recommended Practices for the Implementation of OER Course Marking**

Successful implementation of course marking requires not only clear definitions of what are and what are not eligible instructional materials. It also requires establishment of a proper foundation. If the foundational elements are not established, research suggests the ability of an institution to successfully implement course marking will be severely hampered, if not undermined. Thus, institutions must first ensure these foundational elements are in place in addition to paying close attention to the development of the course marking process itself.

Academic Leadership

The first step to establish course marking is to secure the approval and support of the Chief Academic Officer. Implementation of course marking will involve cross-functional resources, financial support, and faculty and student support. Thus, this effort must begin with academic leadership support as a means of addressing equity (a strategy to address educational access and affordability for minoritized students) and for increasing student success (i.e., affordability, improving academic performance, and increasing persistence and completion).

### OER Stakeholder Implementation Committee

The next step is to create an implementation committee comprised of key stakeholders across the institution, including an associate/assistant provost or a dean, registrar, librarian, faculty member, faculty union leadership member, online learning staff, IT staff, and a student.

The role of gathering stakeholders is critical. First, higher education is a collegial culture where people work together through shared governance to address challenges. Accordingly, this is an essential component to ensure the success of this project. Second, sustainable change only occurs when those affected are involved upfront and are responsible for the outcome. Third, the experience from Massachusetts public institutions who have implemented course marking is that a committee of stakeholders is essential for success.

A four-year institution described the role of stakeholders as follows: "Our efforts were a combination; students requested assistance with rising textbook costs, faculty had a desire to provide equity – access for all, staff understood the importance of this topic, and administration provided funding and support to move this forward."

### OER Course Marking Process

Course marking is currently a manual, time-intensive process at all Massachusetts community colleges and universities. Best practice would be to have a dedicated staff member to manage and oversee an automated process that notifies and receives information from faculty, confirms with the bookstore, continuously monitors course/section/faculty assignments, and uploads the information into the registration system.

If an automated system cannot be acquired, the next best practice is to have adequately designated staff to perform these functions manually. Currently, the process is inconsistent and incredibly time-intensive across the ten institutions that have implemented course marking to-date. Often, the person performing this role does so in addition to their primary responsibilities. If the person were to leave, course marking would likely stop because the practice would not have been institutionalized.

Another major requirement of the course marking process is the evaluation of whether or not the teaching and learning resources selected by faculty are OER/Free, Low-Cost, or traditional, which must continuously be done to ensure integrity in the course marking system. However, this manual process is also cumbersome given changes in courses, sections, faculty assignments, and faculty decisions as to their choice of teaching and learning resources. Thus, these guidelines are provided to clearly define why OER is important, what is and what is not OER or Low-Cost resources, and how best to implement course marking so that it works and is sustainable given its value in contributing to student persistence and academic success.

### **OER Key Performance Indicators**

Over the course of this past year, it became increasingly clear that a structured approach to assess the impact of the use of OER is essential. Many campuses do their own unique method of assessment. However, there was no way the DHE could assess the impact of OER statewide. Thus, the OER Advisory Council developed and recommends the establishment of *OER Key Performance Indicators* (see Attachment B). These *OER Key Performance Indicators* are based on the Open Education Group's COUP (Cost, Outcomes, Usage, & Perceptions) Framework. The group has identified six measures that all

institutions believe they can enact and measure for this coming academic year. These measures include cost savings, equity outcomes, and OER usage as follows:

- Total cost savings (national average cost for textbooks x the number of students compared to the OER/Low-Cost cost x the number of students)
- Total number of OER courses/sections as a percentage of total courses/sections
- Number of students enrolled in OER courses as a percentage of total enrollment
- Changes in DFW rates in OER versus non-OER courses
- Demographics of students taking OER courses versus students in non-OER courses
- Number of faculty, staff, and students participating in OER activities on campus

The proposal to establish *OER Key Performance Indicators* aligns with course marking because course marking will make it far easier to collect and analyze this data.

### **Public Institution Vetting**

The Commissioner sent the Guidelines and *OER Key Performance Indicators* to the presidents of all institutions of public higher education in Massachusetts on April 7, 2021. The institutions were given three weeks to review the course marking guidelines and the proposed *OER Key Performance Indicators*. The Commissioner received responses from six institutions:

- Bristol Community College
- Fitchburg State University
- Salem State University
- Springfield Technical Community College
- University of Massachusetts Lowell
- Westfield State University

Their collective response was overwhelming supportive as noted in the following selected feedback:(see Appendix C in the Guidelines for more detailed campus feedback):

- "100% support [for] course markings."
- "...fully support OER [course markings and key performance indicators] and believe they could be implemented."
- "Supports the DHE's goal to advance the adoption of OER. The KPIs are important indicators to measure as a starting point."
- "The...Guide is a very useful document" and "The KPIs suggested are appropriate."
- "This is a valuable and useful guide. And the KPIs lay a good foundation."
- "[We] recommend moving this important agenda item forward... [we are] in full support of the OER Course Marking Guidelines and the Key Performance Indicators."

The campus feedback was reviewed and considered in a meeting of the OER Course Flagging Committee. Three of the four items of feedback suggested additional measures to include as follows:

- Identify the number of full and part-time faculty using OER
- Look at OER by academic program, i.e., what percentage of program texts are being offered as OER?
- Track the impact of OER courses on retention rates. That is, did full-time, first-year, first-time students who took OER courses the first year return the second year?

The Committee determined that these metrics should be considered for the future, as there were others that the Council itself wished to suggest. The OER Advisory Council felt very strongly that institutions should focus on measures everybody could achieve even if they had not yet implemented course marking. The other feedback item was to provide more detail on how to measure cost savings, which was included in this proposal (see above: "national average cost for textbooks x the number of students compared to the OER/Low-Cost cost x the number of students").

## **Closing**

The *Course Marking Implementation Guidelines* and *OER Key Performance Indicators* will provide public institutions of higher education a roadmap based on best practices for how to implement course marking and a method to assess the impact of course marking at our public institutions.

Implementing course marking will make it easier for students to make informed decisions about whether to enroll in courses using free or low-cost instructional materials. Students will have the opportunity to lower their costs and to increase their student success. In addition, the adoption of *OER Key Performance Indicators* will enable each institution and the DHE to better assess the impact of the time, money and effort placed into advancing the use of OER. As a result, resources can be more cost effectively used to achieve the maximum return on the collective efforts of and financial investment in this initiative.