

# Marking Open and Affordable Courses: Best Practices and Case Studies



# MARKING OPEN AND AFFORDABLE COURSES: BEST PRACTICES AND CASE STUDIES

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## **ABOUT THE PUBLISHER**

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## **ABOUT MAVS OPEN PRESS**

Creation of this resource was supported by Mavs Open Press, operated by the University of Texas at Arlington Libraries (UTA Libraries). Mavs Open Press offers no-cost services for UTA faculty, staff, and students who wish to openly publish their scholarship. The Libraries' program provides human and technological resources that empower our communities to publish new open access journals, to convert traditional print journals to open access publications, and to create or adapt open educational resources (OER). Our resources are openly licensed using Creative Commons licenses and are offered in various e-book formats free of charge, which can be downloaded from the Mavs Open Press OER catalog. Optional print copies of this text may be available through the UTA Bookstore or can be purchased directly from XanEdu, Mavs Open Press' exclusive print provider and distributor.

## **ABOUT OER**

OER are free teaching and learning materials that are licensed to allow for revision and reuse. They can be fully self-contained textbooks, videos, quizzes, learning modules, and more. OER are distinct from public resources in that they permit others

to use, copy, distribute, modify, or reuse the content. The legal permission to modify and customize OER to meet the specific learning objectives of a particular course make them a useful pedagogical tool.

## **ABOUT PRESSBOOKS**

Pressbooks is an open source, web-based authoring tool based on WordPress, and it is the primary tool that Mavs Open Press uses to create and adapt course materials. Pressbooks should not be used with Internet Explorer. The following browsers are best to use with Pressbooks:

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## ABOUT THIS PROJECT

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### OVERVIEW

*Marking Open and Affordable Courses* is a collaboratively authored guide for institutions navigating the uncharted waters of tagging course material as **open educational resources (OER)** or under a “low cost” threshold by summarizing relevant state legislation, providing tips for working with stakeholders, and analyzing technological and process considerations. The book is divided into two main sections. The first section provides high-level analysis of the technology, legislation, and cultural change needed to operationalize course markings. The second section presents tangible case studies for those interested in how others have implemented course markings. The intended audience for the book is administrators, librarians, campus store managers, instructors, registrars, and other professionals interested in OER and affordable resource marking at any size or type of institution, including community colleges, liberal arts colleges, and research institutions.

### CREATION PROCESS

This collaborative book project was managed via the Rebus Community’s web-based software for managing open textbook projects. One of the drivers behind the project was to gain hands-on experience with tools and platforms intended to facilitate the development and distribution of open content. Therefore,

contributors played an important role in helping our community test and refine tools that advance the creation of OER.

The editors aimed for transparency in the publication process by recruiting and interacting with project participants, managing activities, and holding discussions on the *Marking Open and Affordable Courses* project home. An open call for contributors was shared in July 2018 via Rebus channels and to listservs for OER, libraries, campus stores, and registrars. Everyone interested in contributing to the book was asked to submit a proposal by posting to the public discussion board a personal introduction and statement describing the areas where they could contribute. Those volunteering to draft the main body of the book were grouped into small teams of three or more and were assigned a section leader. Section leaders were responsible for facilitating the co-creation of assigned section content, communicating with editors on behalf their team, and ensuring peer review feedback was addressed. All case study proposals that matched the scope of the book were accepted; the case study authors worked individually or with a small group of self-selected contributors. All contributors were given access to the full manuscript throughout the drafting process and were encouraged to read and provide feedback on other sections and case studies. This approach allowed authors to draw from examples throughout the text and to shape content covered in other sections.

In Spring 2019, a single peer reviewer was invited to read and provide high-level feedback on the text. The review confirmed the need to adjust the scope of the book from OER to open and affordable resources, originally suggested by one of the section leaders, and a revision period followed. A formal call for peer reviewers was announced in September 2019 via the same channels used to recruit authors. Over 60 potential reviewers expressed interest in the project within the first 24 hours after the call was posted, far exceeding the required number, so the



call was promptly closed and moved instead to a waitlist. In Fall 2019, 29 reviewers read and provided feedback on the manuscript using Hypothesis, an open source web annotation tool. Some were assigned deep reading of a small number of chapters; others were assigned a broad reading of the entire manuscript. All feedback was identifiable by reviewer and shared with the book's 30 authors.

Though efforts were made to involve a variety of stakeholder groups, particularly campus store managers and registrars, the majority of volunteers were librarians. As noted throughout the book, the practice of marking courses as open or affordable is not well reflected in current literature on higher education. *Marking Open and Affordable Courses* aims to fill an clear content gap; however, this publication represents only the beginning of what we believe will continue to be a robust and complex conversation. We invite readers to continue the conversation by interacting with the text using Hypothesis, posting to the project discussion board, and sharing experiences and examples on Twitter using the project hashtag #MarkingOER.

## **NOTE FROM THE PROJECT MANAGER**

My journey into marking open and affordable courses began almost three years ago when Texas became one of the first states to pass legislation requiring institutions of higher education to provide students with searchable information about courses that use OER. Establishing OER as a course designation was new territory, and I found myself longing for a roadmap that didn't exist. As a fellow in the SPARC Open Education Leadership Program, I set out to develop that roadmap for my colleagues at other Texas institutions with support from my mentor, Steven Bell, and program leaders, Nicole Allen and Dr. Tanya Spilovoy. Jessica Kirschner and Sarah Hare were among the peer reviewers of that early text, the Texas Toolkit for OER Course Markings, and I am still humbled by the depth and generosity of their

feedback. I was encouraged by their comments, and their notes about content gaps and suggestions for improvement aligned perfectly with my own assessment and vision for the toolkit's growth.

Zoe Wake Hyde from the Rebus Community approached me in Spring 2018 about expanding the toolkit as part of the Rebus Projects beta. It was an exciting opportunity to contribute to the development of open platforms and experiment with open tools and processes. However, I knew I couldn't tackle such a project alone. Jessica and Sarah were first on my list of possible co-editors, and I've thanked my lucky stars each and every day since for their willingness to invest time and energy in understanding the complex puzzle of course markings. They are critical, invested, compassionate, reliable, and generous colleagues, and we as an open community are better because of them.

In time, as over 60 additional people joined the project team to make this book possible, we have been inspired and amazed by the generosity of our community. To all who authored, reviewed, encouraged, and otherwise supported this project, we extend our deepest gratitude.

A handwritten signature in blue ink that reads "Michelle Reed". The signature is fluid and cursive, with a small dot above the 'i' in Michelle.

Michelle Reed

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## INTRODUCTION

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Students select courses for a variety of reasons, including their interests and career goals, degree requirements, scheduling considerations, and even the instructor of record. Students' decision-making process for crafting their course schedule and prioritizing these factors is dependent on how transparent information about each course is to students in the **schedule of classes**.

One important factor in students' academic decision-making is textbook and course material costs, which, for the purposes of this book, may be used interchangeably when referencing commercial materials, including access codes for propriety homework platforms and resource bundles. A large percentage of students, especially those from historically underserved populations, struggle with the high costs of these materials (Senack 2014). Some may purchase books after skimping on other necessities, like rent or food. Others concerned with costs will intentionally decide to wait until the first week of class or later to determine if required materials will be used regularly and should be purchased, perhaps never actually buying the books needed for their courses.

*Marking Open and Affordable Courses: Best Practices and Case Studies* explores both of these issues—student transparency and affordability—in greater detail, providing institutions of higher education guidance on designating course material costs in their

**student information systems (SIS)** or via other means. Student agency, or students' ability and autonomy to use information to make informed decisions, is foundational to student success. Marking the schedule of classes with details about required course materials provides a mechanism for students to learn more about the course and weigh the course material costs with their financial circumstances.

*Marking Open and Affordable Courses* began as an exploration of how openly licensed course materials, called **open educational resources (OER)**, might be designated in the schedule of classes in order to increase transparency and raise broader awareness about OER. However, as a majority of the book's case studies demonstrate, institutions often adopt the broader vocabulary of free, zero-cost, affordable, or low-cost resources for their course marking efforts, thereby including OER use with other types of affordable course materials that do not share all the benefits of openly licensed content. The book explores the range of course material markings available and discusses the benefits and limitations of terminology used to mark courses.

## **COURSE MARKING**

Course marking, as defined in this book, is the process of assigning specific, searchable attributes to courses. This can include the practice of creating searchable, stand-alone lists of courses with shared features. Course marking enables students to make informed decisions about their schedules when they register for classes. It is used in this text as an umbrella term for course designations, attributes, and tags, all of which may carry specific meaning within an institution's SIS. Courses are marked with letters, numbers, graphic symbols, or colors to help students quickly identify important information to aid in their decision making and allow them to efficiently plan their academic careers.

Though relatively new to open and affordable resources, course

marking is a common practice in higher education. **Course markings** allow students to filter by the mode of delivery (e.g., face-to-face, hybrid, online), instructor of record, campus location, course title, class times and dates, and academic session. The ready availability of this information allows students to find courses that meet major, program, or graduation requirements. Some course markings indicate that courses meet specific requirements, such as prerequisites or corequisites, or designate courses as honors, capstone, writing intensive, oral communication, research intensive, diversity, or service learning. For example, the University of Hawai'i at Mānoa requires students to take a required number of general education courses with a Focus designation in order to graduate. These Focus courses are marked by a corresponding letter as follows: Contemporary Ethical Issues (E), Writing Intensive (WI), Oral Communication (O), and Hawaiian, Asian, & Pacific Issues (H).

Course markings were originally found in print **course catalogs**, accompanying course descriptions. As course catalogs moved online, course markings continued their prominence as a part of the course selection process. Now, electronic SIS used for registration also allow students the ability to search for classes using these unique attributes, easing the selection of classes that meet graduation requirements or personal preference. A blog post from the American Association of Collegiate Registrars and Admissions Officers called this type of system “the interactive catalog of the future,” boasting its seamlessness and improved searchability, connectivity, accuracy, and efficiency (2016).

## **COURSE MATERIAL AFFORDABILITY**

Course materials have become less affordable as textbook costs increased 88% between 2006 and 2016 (U.S. Bureau of Labor Statistics 2016). This increase, coupled with the rising cost of tuition and other fees, has made graduating in four years more of a challenge, disproportionately affecting low-income students

and students who might need to accommodate demanding work schedules, child and family care, and other responsibilities (Colvard, Watson, and Park 2018). Indeed, numerous studies demonstrate that course material costs have a powerful impact on student behavior. A 2014 report by the Student Public Interest Research Group shows that 65% of students chose to forgo purchasing a required educational resource because of cost (Senack 2014). The vast majority of these students said they did so despite recognizing the decision could have a negative impact on their grade in the course. The report also shows that resource costs impact the number and type of courses in which students enroll. These findings echo other studies, such as the 2016 Florida Student Textbook and Course Materials Survey, which presents sobering evidence that students attribute course material costs to dropping, failing, and withdrawing from courses or taking fewer courses, all of which lengthen time to graduation (Florida Virtual Campus 2016).

Institutions of higher education have responded to the problem of high textbook costs by creating course material affordability initiatives. Academic libraries have long provided textbooks and other materials on reserve, purchasing a copy of a required textbook and allowing students to check it out for a limited time. More recently, libraries have started to more systematically promote electronic library-licensed content as a potential solution as students already pay the fees that support the acquisition of eBooks and other material (see examples of programs centered on library-licensed content in Walz, Jensen, and Salem 2016). Campus stores have created used and rental programs to enable student access to course materials at a reduced cost and/or for a short period of time. Some campuses have spearheaded automatic purchasing programs (e.g., eText and **“inclusive access”**) in which publishers provide students day-one access to digital materials at a reduced cost, usually for an entire class, in exchange for the guarantee that a high

percentage of students will participate. Students are typically enrolled in such programs automatically, though institutions are required to provide opt-out options. The legality of such programs has been contested, as evidenced by the class-action lawsuit filed in 2020 against several major publishers and bookstore chains (McKenzie 2020).

Finally, OER initiatives have gained traction in recent years. OER are free teaching and learning materials that are intentionally licensed to allow for revision and reuse. OER initiatives frequently incentivize **instructors'** adoption of OER and promote the many benefits inherent in using OER, including free and unfettered student access, instructor agency, and the opportunity to pool resources and build course materials collaboratively (Jensen, n.d.).

## OPEN EDUCATIONAL RESOURCES

The term “OER” was coined at the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries. Since then, a number of organizations have offered different definitions of OER, though they consistently emphasize free, unencumbered access and flexible intellectual property rights. A commonly cited definition comes from the William and Flora Hewlett Foundation:

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. (Hewlett Foundation 2015)

The latter half of this definition—the copyright status and licenses—differentiate OER from other course materials and make them a unique solution for affordability. While the other course material affordability strategies mentioned previously can lower the immediate cost for the course materials, students

only have access to the materials for a limited period of time. For example, while content included in automatic purchasing programs is granted to students from day one at a lower price, students typically lose access to this content either at the end of the semester or a later designated time. This can be problematic for foundational content that students will need to revisit and review in later classes. Similarly, library-licensed content is free for students with university IDs and logins, but they typically lose that access upon graduation. OER, on the other hand, allow users to retain materials indefinitely and pass the materials along to others who might need them, without violating copyright.

OER copyright permissions are frequently communicated via a Creative Commons license. The licenses that allow for unlimited retention also generally allow for modification of course materials, with the exception of the Creative Commons No-Derivatives license. Thus, with OER, instructors have the flexibility to edit content or combine multiple sources to create new course materials that match their desired course plan and learning outcomes instead of adapting syllabi to match commercial resources. OER can be customized to reflect the institution and its student body, allowing students to better relate to content.

David Wiley describes the unique ability to retain, reuse, revise, remix, and redistribute OER without limitation as the “5 Rs” (2014). The 5 Rs, combined with the ability to freely access the materials, means OER can have a significant impact on students’ learning experiences. For example, a growing body of research indicates that students do as well or better in courses that use OER compared with traditional commercial course materials (Open Education Group 2019). Other studies show a significant increase in **enrollment intensity** among students enrolled in OER courses (Fischer et al. 2015). An Appendix B (OER Benefits) is included with a brief list of other benefits that OER offers instructors, students, and institutions.

## OPEN AND AFFORDABLE COURSE MARKINGS

A small number of colleges and universities in the United States have implemented a systematic method for communicating the availability of courses that utilize OER with students at the time they are building their course schedules. For example, the Scholarly Publishing and Resource Coalition (SPARC) reported that less than a quarter of the 132 member institutions that replied to their 2018/19 Connect OER survey reported that they had some form of course material marking in their schedule of classes (SPARC 2019).

While institutions are required to provide textbook information for students as a result of the **Higher Education Opportunity Act** (U.S. Department of Education 2008), this information is not always effectively integrated with the schedule of classes. Often, information about course materials and their costs is provided by the campus store. The schedule of classes may provide a link to the store's website; otherwise, students would have to navigate and search the site separately. By integrating course materials cost information into the SIS via course markings, students receive class and cost information in one spot, helping them make informed decisions.

Additionally, course markings vary widely by institution and are not limited to open or OER. Markings also include such designations as free, no-cost, or zero textbook cost (ZTC), low-cost or affordable, and inclusive access. Terminology and interpretations of these labels are institutionally derived, with perhaps the biggest variance being the cost threshold (e.g., \$25, \$40) for affordable or low-cost courses (Chapter 12 [Branding]). While affordable and low-cost markings do not convey exact costs, the accompanying definitions help students budget for their classes. Open, free, and zero-cost labels indicate that a course has no course resource costs.

The strategy to avoid the use of “open” or “OER” when marking courses is often a pragmatic compromise intended to make the marking understandable by a wider student audience. However, this choice can be problematic for research studies that focus specifically on OER, hampering the institution’s ability to measure the specific use and impact of openly licensed content in classrooms. Those interested in OER marking have to balance their commitment to open access with their desire to further student agency, ensuring that student-facing interfaces and options are as straightforward as possible.

## **TRANSPARENCY AND STUDENT AGENCY**

Course markings are key to students having agency while selecting their courses. Not only do markings allow students to make educated decisions about the courses in which they enroll, but they provide integral information about courses, including course sequencing and degree requirements.

For open and affordable courses, marking efforts also reinforce the goal of price transparency required by the federal Higher Education Opportunity Act (U.S. Department of Education 2008). As mentioned above, textbook costs can have a significant impact on a student’s educational experience, with even the smallest extra expense becoming the link between staying in school or dropping out, as demonstrated by data collected by Oregon’s Higher Education Coordinating Commission (Open Oregon 2019). Even when institutions seek to provide students with information about course material costs before they register for a particular course, difficulties with academic calendars frequently impede success. Instead, students often register for a course months in advance and then cannot access bookstore or syllabus information about required course materials until a few weeks before the semester, quarter, or term begins. Please note these terms may be used interchangeably throughout the text to denote a single academic period.



By integrating resource costs into the registration process, institutions aid students in making informed, timely decisions. Based on the studies cited above, such as the Florida Student Textbook and Course Materials Survey, it is clear that these costs can impact which classes students choose to enroll in or which majors they pursue. By increasing transparency through the schedule of classes, students have ready access to all the information need to make their course selections, even to the section level. Such transparency increases student agency in their academic careers, allowing them the greatest possibility for success.

## **ABOUT THIS BOOK**

*Marking Open and Affordable Courses* is a practical guide for institutions navigating the uncharted waters of course material markings, summarizing relevant state legislation, providing tips for working with stakeholders, and analyzing technological and process considerations.

The book is divided into two main sections. The first section provides a high-level analysis of the technology, legislation, and cultural change needed to operationalize course markings and is organized with readers' processes in mind, moving from government mandates, preliminary information gathering, and understanding technical requirements to communicating markings to key constituents and collecting data to demonstrate impact. The first section draws heavily on case studies presented in the second section, providing real-life examples when concepts and strategies are discussed. The nine case studies presented in the second section offer tangible examples for those interested in how other institutions have implemented course markings. Case studies were collected voluntarily based on interest and reflect a range of institution types, markings, and SIS.

Federal and state legislation related to course marking is explored in Section I (Policy). Beginning with Oregon in 2015, a small number of states have passed legislation requiring institutions of higher education to publicly identify open and affordable resource use in course descriptions, course schedules, or online registration systems.

Section II (Stakeholders) highlights important considerations when working with different stakeholder groups. Open and affordable course material initiatives, particularly those involving course markings, have the potential to impact stakeholders who have vastly different responsibilities, opinions, and experiences. Additionally, the concept of OER may be new to many involved with establishing policies and workflows related to increasing transparency about OER use. The implementation process can be complex, even contentious, and requires frequent communication with a variety of stakeholders.

Designating courses as open and affordable inevitably requires altering or customizing the student information system (SIS). Such customization can be overwhelming and resource-intensive, depending on the system used and the technical resources available at the institutional level. Section III (Mechanics) explores various SIS functionality while compiling general best practices for those interested in planning and executing SIS changes to accommodate course markings. It also provides considerations for integrating the new course materials markings into textbook reporting and schedule generation processes.

In Section IV (Branding and Communication), the book explores the imperative work of communicating and continuously improving the promotion of open and affordable course markings. Without easy-to-understand markings and targeted, effective communication to stakeholders, course marking endeavors can be futile. These sections explore vocabulary

considerations, discuss marketing basics, and utilize videos and flyers to illustrate message design.

Demonstrating the impact that course marking has on student awareness and decision making is key to continuing course marking initiatives. Section V (Impact) explores the types of impact course marking programs can demonstrate, including changes in student awareness and enrollment. While there are a limited number of examples of institutions that document the significance of open and affordable course markings, the section discusses possible strategies for those interested in making the case for continued resources and campus support.

Finally, Section VII (Case Studies) is devoted to short, informal case studies authored by instructors, librarians, campus store managers, and other stakeholders at institutions that have already implemented course markings. These case studies span the United States and Canada, with several types of institutions and SIS represented. A few case studies extend beyond individual institutions, documenting the course marking process at the consortium or state level (Table 1 in Case Studies provides more information). Case studies are intended to complement the sections above, giving readers practical applications of the concepts discussed.

As the book provides guidance and examples of course markings, a number of terms are introduced. To further complicate the matter, similar items are often referred to differently by varying institutions. To assist readers and those new to course material affordability or course markings, key terms are defined and differentiated in the book's Glossary.

## **LIMITATIONS AND SCOPE**

Marking open and affordable course material is an incredibly nascent area of the literature on OER, with almost no case studies or formal research published on this topic. While an

existing OER or affordable course material initiative or incentive program is not a required precursor for designating materials in the schedule of classes, these activities are synergistic. Having a program in place, and some existing knowledge about OER on campus, can aid in rallying support and resources for course marking and even help institutions quickly find courses to mark. Similarly, marking OER and affordable courses can result in more instructors and students learning about course material affordability and having an established OER program in place can provide an immediate opportunity for those interested to become more systematically involved. For this reason, *Marking Open and Affordable Courses* focuses on course marking specifically but also inherently discusses the benefits of having a larger OER or affordable course material program alongside a course marking initiative.

*Marking Open and Affordable Courses* makes visible ideas and implementations that are still evolving. The authors hold that OER use and course marking is the ideal. We know the permissions inherent in OER are fundamental for furthering teaching and learning. However, this book reflects the current state of the field as much as possible in an effort to inspire conversation about what could be.

Thus, while there are many benefits to using OER, the book intentionally centers on cost and affordability. The high cost of course materials is generally the primary impetus for starting a course marking initiative, but they need not be the last word. Once designating course material costs becomes more commonplace, institutions should consider making open or OER a more regular marking. Doing so can start conversations with instructors and students about how open differs from (and often exceeds) other affordable course material solutions.

## PART I.

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# POLICY

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Policy has played a significant role in accelerating the practice of open and affordable **course markings**. States and institutions that are not currently subject to legislative mandates have an opportunity to be proactive now, or else they will likely need to be reactive later. This section will explore the history of federal and state legislation related to course materials marking and the implications for institutional course marking policies. It will also offer a comprehensive summary of current state initiatives related to course marking and the differences and similarities between them.



## CHAPTER 1.

### STATE AND FEDERAL LEGISLATION

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State and federal legislation have played a significant role in laying groundwork for open and affordable **course marking**. Seven states passed course marking mandates between 2015 and 2019, and these bills have foundations in an earlier federal requirement that introduced textbook information into course schedules. This chapter explores the history of open and affordable course marking policy and analyzes different approaches. It also offers insight in how the role of policy may evolve in the future.

#### FOUNDATIONS IN TEXTBOOK PRICE DISCLOSURE LAW

The history of open and affordable course markings dates back to state and federal legislation in the mid-2000s concerning textbook price disclosure in an institution's **schedule of classes**. The issue of textbook affordability first gained national attention in 2004, with an exposé released by Student Public Interest Research Groups, which found textbook prices had risen more than four times the rate of inflation (Student PIRGs 2004). The findings struck a nerve with students, parents, and politicians alike, and within a few years states began introducing legislation designed to increase textbook price transparency.

In 2007, Congress took up reauthorization of the Higher

Education Act of 1965, the law governing the nation's college and university policies, which was ultimately achieved with the passage of the **Higher Education Opportunity Act** (HEOA) in 2008. Senator Dick Durbin of Illinois championed the issue of textbook affordability during the process, drafting a set of provisions that were ultimately codified into law under Section 133 (20 USC 1015b). Among the provisions was a requirement that colleges and universities eligible for **Title IV** funding must, to the maximum extent practicable, disclose the ISBN and retail price of college textbooks in the online course schedule students use for registration. The textbook information provisions took effect on July 1, 2010, and were evaluated by the Government Accountability Office (GAO) in 2013. The relevant portion of Section 133 reads:

To the maximum extent practicable, each institution of higher education receiving Federal financial assistance shall—

(1) disclose, on the institution's Internet course schedule and in a manner of the institution's choosing, the International Standard Book Number and retail price information of required and recommended college textbooks and supplemental materials for each course listed in the institution's course schedule used for preregistration and registration purposes, except that—

(A) if the International Standard Book Number is not available for such college textbook or supplemental material, then the institution shall include in the Internet course schedule the author, title, publisher, and copyright date for such college textbook or supplemental material; and

(B) if the institution determines that the disclosure of the information described in this subsection is not practicable for a college textbook or supplemental material, then the institution shall so indicate by placing the designation "To Be Determined" in lieu of the information required under this subsection; and

(2) if applicable, include on the institution's written course



schedule a notice that textbook information is available on the institution's Internet course schedule, and the Internet address for such schedule. (U.S. Department of Education 2008)

This provision instigated a shift in the responsibility of institutions for providing textbook information to students. Historically, textbook information was typically not available at the time students registered for courses (often several months in advance). Visiting the college bookstore prior to the start of the term was often the most reliable way to get information about book adoptions. Following the passage of HEOA, institutions had just under two years to update their systems to ensure that students had access to textbook information at the time of registration.

Though HEOA doesn't explicitly address open content, the Act applies to all OER that meet the definition of "college textbook" or "supplemental material." If the resource doesn't have an ISBN, disclosure of the title, author, etc. is required unless disclosure is deemed "not practicable." In its 2013 report, the GAO reviewed a nationally representative sample of school websites and found that about four out of five institutions provided students with the textbook information specified in the HEOA provisions (U.S. Government Accountability Office 2013). Most of these institutions also made the information public, allowing both current and prospective students to access it. The GAO concluded that students had benefited from having access to the information about assigned textbooks, both because students were able to compare prices on and off campus and because students were able to consider cost when enrolling in courses.

## **STATE LEGISLATION**

As textbook price disclosure became a regular part of an institution's schedule of classes, marking low-cost, free, or open materials also started to gain traction as part of state-level OER

policy. Driven by public outcry against the ever-increasing cost of college textbooks, state legislatures have begun turning to OER as a mechanism for supporting college affordability.

As of 2019, 28 states had introduced legislation relating to OER, and 15 had enacted state laws (SPARC 2019b; sparcopen 2020). Several additional states had created major initiatives not specifically tied to funding. State legislation pertaining to OER falls into several categories. The largest policy category is state funding to support OER initiatives, most frequently grant programs, but also other efforts including curation and creation. Several states also created permanent or temporary statewide OER councils charged with running such programs or conducting studies. Other policy mechanisms include directing institutions to establish OER guidelines, issuing directives to instructors or institutions to raise awareness of OER, or increasing transparency.

Seven states have enacted legislation concerning open and affordable course schedule markings. The first was Oregon in 2015, followed by California, Washington, Texas, Colorado, Virginia, and Louisiana. Each piece of legislation is summarized below and described in detail in the next section. The following considerations are addressed in each summary:

- What types of materials should be marked (OER, free, or low-cost)
- The extent of OER use required to qualify a course for marking
- The scope of institutions covered by the mandate
- The length of time provided to implement the requirement
- Whether the requirement is subject to further guidelines or rule making by a state agency

## OREGON HOUSE BILL 2871 (2015)

Oregon was the first state to pass legislation requiring course schedule marking for open and affordable materials. Passed in 2015, House Bill 2871 was a comprehensive bill designed to expand the use of OER at public higher education institutions in the state. Major provisions in the bill included creating an OER grant program and establishing an OER staff position within the Higher Education Coordinating Commission. The OER course marking requirement reads as follows:

Each public university listed in ORS 352.002 and community college shall prominently designate courses whose course materials exclusively consist of open or free textbooks or other low-cost or no-cost course materials. The course designation required by this section must appear in the published course descriptions that are on the Internet or are otherwise provided to students at the time of course registration, including on the campus bookstore course materials list that is provided for the course. (Oregon HB 2871 2015)

This requirement is typical of other states as well. It applies to public institutions only, and specifies a broader category of free and low-cost materials in addition to OER. The term “low-cost” did not, however, carry a statutory definition, and was left to interpretation by individual campuses. Mt. Hood Community College provides an example of an institution that implemented course markings as a result of HB 2871.

Three years later, a 2018 report for the Oregon Higher Education Coordinating Commission found that implementation of this requirement across Oregon was uneven (Freed et al. 2018). While most institutions, particularly community colleges, had implemented designations, students were not always aware of them, or the information had not become available to them, in time to use the designations to factor in cost when selecting courses. Students were, however, strongly supportive of the idea of course marking. The report

makes several recommendations, including adopting a consistent method of marking course schedules across all institutions in the state, collecting book assignment information earlier, and better informing students about what “OER” means.

## CALIFORNIA SENATE BILL 1359 (2016)

In 2016, California was the second state to pass legislation (Senate Bill 1359) requiring OER markings. Like Oregon’s, California’s policy impacted public institutions and broadened the scope beyond OER to include all free digital materials and their low-cost print counterparts. Also like Oregon, California did not provide any further definition for the meaning of “low-cost.” California’s requirement reads as follows:

Clearly highlight, by means that may include a symbol or logo in a conspicuous place on the online campus course schedule, the courses that exclusively use digital course materials that are free of charge to students and may have a low-cost option for print versions. (California SB 1359 2016)

California has a long legislative history pertaining to OER. One of the first states to pass comprehensive legislation, California has a standing faculty council and statewide digital library dedicated to OER and has made several large appropriations in more recent years. The course marking requirement is mandatory for two of the three public higher education systems, the California State University and California Community Colleges. The state’s constitution grants the University of California broad institutional autonomy, and therefore the legislation requests rather than requires compliance by the system.

## WASHINGTON HOUSE BILL 1375 (2017)

Washington became the third state to codify open and affordable course markings in 2017, with House Bill 1375. Like California, Washington has a long legislative history on OER and adopted

the requirement as a stand-alone bill. An excerpt reads as follows:

To the maximum extent practicable...a community or technical college shall provide the following information to students during registration by displaying it in the online course description or by providing a link that connects to the bookstore's web site or other web site where students can search and view:

- (a) The cost of any required textbook or other course materials; and
  - (b) Whether a course uses open educational resources.
- (Washington HB 1375 2017)

Washington's requirement is unique in that it applies only to the state's community and technical colleges. Several factors likely contributed, including that the state had funded a high-profile OER program at the community and technical college system known as the Open Course Library, which in 2013 finished outfitting 81 high-enrollment courses with free and low-cost materials (Open Washington n.d.). The case for course markings was linked to helping students identify courses using these materials. The community and technical colleges also have a common course numbering system and frequently share technology, which makes implementation of course markings simpler.

#### TEXAS SENATE BILL 810 (2017)

Texas also passed a marking requirement in 2017 with Senate Bill 810, which included the provision in a broader bill that encompassed OER in both K-12 and higher education. An excerpt follows:

Each institution of higher education shall:

- (1) for each semester or academic term, compile a course schedule indicating each course offered by the institution for the semester or term to postsecondary students;

(2) with respect to each course, include with the schedule a list of the required and recommended textbooks that specifies, to the extent practicable, the following information for each textbook:

(A) the retail price;

(B) the author;

(C) the publisher;

(D) the most recent copyright date; [and]

(E) the International Standard Book Number assigned, if any; and

(F) whether the textbook is an open educational resource; (Texas SB 810 2017)

Of all of the state requirements examined in this chapter, SB 810 provides the most extensive legal requirements. The bill goes on to describe when and how information must be disclosed and requires institutions that have a searchable schedule to build an OER filter into the search function. Notably, this section of SB 810 builds upon existing state statute that codified in 2009 the HEOA textbook price disclosure provisions into Texas state law.

SB 810's detailed approach to open and affordable course marking eased certain aspects of planning. The bill included a clear definition of OER, explicit instructions on when and how to mark courses, and a requirement to add OER courses to search functions in the schedule of classes. However, a very short time frame for implementation, a matter of months, was unrealistic for most institutions. The implementation of SB 810 will be discussed extensively in Chapter 2 (Legislative Implications) and in Houston Community College's case study.

## COLORADO HOUSE BILL 18-1331 (2018)

Colorado passed its course marking requirement in 2018 as part

of a comprehensive OER bill designed to implement a set of recommendations made by an OER council established in House Bill 18-1331. HB 18-1331 created a standing OER council to implement an OER grant program, awareness campaign, and coordination activities among the public institutions in the state, along with a \$660,000 appropriation. A provision was added to the final draft of the bill to also require the Colorado Commission on Higher Education to develop guidelines for OER course designations.

The commission shall adopt guidelines to require public institutions of higher education to ensure that, beginning in the fall of 2021, students are informed prior to course registration concerning which courses and sections use open educational resources or other low-cost materials. (Colorado HB 18-1331 2018)

Colorado's approach was slightly different than the other states, in that it did not directly mandate institutions to implement course marking, but instead delegated authority to a state agency to develop more specific guidelines. It also offered a lengthy implementation period of three years.

## VIRGINIA HOUSE BILL 2380 (2019)

In 2019, several states considered course marking legislation. Virginia House Bill 2380 was the first to pass into law. The legislation added the requirement to a section of code dedicated to course materials. The statute states

The registrar or another appropriate employee of each public institution of higher education shall identify conspicuously in the online course catalogue or registration system, as soon as practicable after the necessary information becomes available, each course for which the instructor exclusively uses no-cost course materials or low-cost course materials. (Virginia HB 2380 2019)

Unlike the earlier laws passed in other states, Virginia's omits any mention of OER and only requires marking of no-cost or low-cost materials.

## LOUISIANA SENATE BILL 117 (2019)

Louisiana’s Senate Bill 117, also passed in 2019, requires the marking of both OER and “**affordable educational resources**” (AER):

Use a conspicuous symbol, logo, or other distinguishing feature to highlight each course included in its course schedule that exclusively utilizes AER or OER course materials and ensure that these course materials comply with the federal Americans with Disabilities Act. (Louisiana SB 117 2019)

Multiple states have included language relating to “affordable” or “low-cost” materials, but Louisiana is the first to offer an explicit definition. The definition applies to traditionally copyrighted materials that are available to students for less than “four times the federal minimum wage,” which in 2019 amounted to \$29. Table 1.1 presents a summary of state legislation. Links to all laws can be found in the Course Marking Legislation section of the References.



**Table 1.1: State legislation regarding open and affordable course marking (2015-2019)**

<b>State</b>	<b>Year Passed</b>	<b>Name of Law</b>	<b>Scope &amp; Type of Institutions Impacted</b>	<b>Type of Materials Covered</b>	<b>OER Defined</b>	<b>Extent of Use Required</b>
<b>Oregon</b>	2015	HB 2871	Public institutions	OER, no-cost or low-cost	Yes	Courses that use OER are exclusively identified
<b>California</b>	2016	SB 1359	Public institutions	OER	No	Courses that use OER are exclusively identified
<b>Washington</b>	2017	HB 1375	Community & technical colleges	OER	No	Courses that use OER may be identified
<b>Texas</b>	2017	SB 810	Public institutions	OER	Yes	Courses that use OER may be identified
<b>Colorado</b>	2018	HB 18-1331	Public institutions	OER or low-cost	Yes	Courses that use OER may be identified
<b>Virginia</b>	2019	HB 2380	Public institutions	No-cost or low-cost	No	Courses that use OER are exclusively identified
<b>Louisiana</b>	2019	SB 117	Public institutions	OER or low-cost	Yes	Courses that use OER or low-cost materials are exclusively identified

## NATIONAL TRENDS

Between 2015 and 2019, 14% of U.S. states adopted legislation to require open or affordable markings in course schedules or catalogs; it is likely the trend will continue to spread nationwide. Software providers of **student information systems (SIS)** seem to be reading the writing on the wall, with at least one company, Civitas Learning (2018), announcing a feature for marking courses that use OER. However, a growing patchwork of state-level requirements is bound to create difficulties for large vendors, who depend on serving a national market for economies of scale. Thus far, all of the states to adopt open and affordable course marking requirements have large markets, especially California and Texas. Institutions in smaller markets that attempt to adopt one-off or institution-specific requirements may have more difficulty getting vendor assistance with implementation.

Meanwhile, conversations have been underway in Congress for several years toward reauthorizing the HEA, which would present an opportunity to add OER to the existing textbook information disclosure requirements under Section 133. Proposed language is included in the **Affordable College Textbook Act** (H.R.2107 and S.1036), which was reintroduced into the U.S. Congress in April 2019. If adopted, such a requirement would mandate open and affordable course marking across virtually all institutions in all states. Institutions in states with an existing policy would be required to comply with both federal and state requirements.

Policy mandates are only one avenue to adopting the practice of course markings. Significant action can happen on the institution, system, and state level without formal requirements from government. For state institutions without mandates, thinking proactively about implementing a course marking system can provide greater freedom in decision making,

definition creation, and implementation processes. As state mandates expand, thinking proactively will prevent having to respond reactively. For example, though legislated timelines for implementation are sometimes ample—Colorado’s was three years—Texas institutions were given only months. Further, approaches to defining course marking by state mandate differ, as shown by those of Virginia and Louisiana, inadvertently creating confusion and hesitation. When state institutions have the option of creating their own definitions of “OER,” “low-cost,” and “no-cost,” greater clarity is attained for all those affected on campuses.

Understandably, when a state institution does not have a mandate, it can be difficult to pull resources together to create a course marking plan, but by starting these discussions, state institutions have a real opportunity to create the course marking plan that works best for their institution, rather than having to respond expeditiously to legislative requirements.



## CHAPTER 2.

### LEGISLATIVE IMPLICATIONS

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Approaches to crafting OER legislation vary. Some states offer narrow definitions of terms such as “**open educational resources (OER)**” or “low cost,” whereas others leave more room for interpretation. Some laws apply to all institutions, while others apply only to some public institutions. Institutional administrators and faculty affected by **course markings** legislation must understand the law and their responsibilities. Moreover, how legislation is interpreted has a large impact on how it benefits students. The following steps provide strategies for institutions responding to recent or potential legislation to mark open and affordable courses, in addition to policy markers that can be considered when drafting legislation.

#### STEP 1: UNDERSTAND WHAT NEEDS TO BE MARKED

Most states mention OER in some capacity, but unfortunately only some offer a detailed definition of OER. Likewise, some states allow for marking of materials other than OER, namely low-cost or no-cost materials. In some cases these terms are defined, and in other cases they are not.

For example, Texas SB 810 defines OER as

...teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property

license that allows for free use, reuse, modification, and sharing with others, including full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.” (Texas Senate Bill 810 2017)

In contrast, Oregon defines OER as teaching, learning, and research resources that

(a) Reside in the public domain or that have been released under an intellectual property license that permits their free use and repurposing by others; and (b) Conform to the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and to any additional accessibility standards established by the Higher Education Coordinating Commission by rule. (Oregon House Bill 2871 2015).

The Texas definition includes a more detailed description of legal permissions and explicitly describes the kinds of materials that are included. Oregon includes a less specific but roughly equivalent definition of OER but also adds that materials must also be compliant with the Americans with Disabilities Act. Therefore, some materials may qualify to be marked as OER in Texas but not in Oregon, or vice versa.

Louisiana, Oregon, and Virginia explicitly allow for the marking of low-cost materials that do not meet the definition of OER. Louisiana is the only state to offer a definition of this type of term:

“Affordable educational resource” or “AER”, means a single or collection of required educational resources that may be offered at no or low cost to a student through a postsecondary education institution or an affiliated college bookstore at a pre-sales tax cost to a student that does not exceed an amount equal to four times the federal minimum wage. AER includes copyright protected material purchased by a library and provided to a student at no cost. (Louisiana Senate Bill 117 2019)

When legislation does not provide a clear definition of what

needs to be marked, it is up to the institution to adopt a definition. We come back to this issue in Step 5.

## **STEP 2: DETERMINE WHAT ACTIONS ARE REQUIRED UNDER THE LAW**

Once it has been established which materials qualify, the next step is to determine the institution's responsibilities under the law. For the purposes of discussion, consider the following questions:

- Is the law applicable to the institution?
- Does the law require marking at the material level or course level?
- What materials qualify for marking under the law?
- How would the law apply to cases in which a course uses both qualifying and non-qualifying materials?

The answer to these questions varies depending on the relevant statute. For example, most states require open or affordable course marking to be implemented on a course-by-course level, whereas Texas requires marking for each individual material assigned for a course. Texas also includes an additional requirement to make OER markings searchable.

There are other specific legal distinctions that appear in legislation. For example, California's law applies to courses that "promote OER," and therefore could be interpreted to apply to a course that uses OER alongside traditional materials (possibly even expensive ones). On the other hand, Texas provides a much clearer directive to mark a course only if it "requires or recommends only" OER.

It is vital for college and university administrators to carefully read, understand, and seek legal guidance to ensure they understand how to comply with the letter of the law.

### STEP 3: UNDERSTAND HOW MUCH FLEXIBILITY THE STATUTE PROVIDES

An important part of implementing a statute is to determine which requirements are mandatory and which offer some flexibility. For example, some statutes offer some leeway by using the word “may” or with the phrase “to the maximum extent practicable.” In contrast, the word “shall” typically signals that a command is legally mandatory. Statutes also vary in their level of specificity. Some are more prescriptive about the manner by which **course markings** must be implemented, whereas others leave it to the institution to choose the manner of implementation.

It is important to read the pertinent statute and relevant citations in their entirety to ensure that all relevant requirements are understood. Qualifying language that provides or restricts flexibility may appear in another portion of the legislation, or the requirements may be affected by existing statute. For example, the Washington statute states that applicable institutions “shall compile a list,” using the word *shall* to signify it is mandatory. However, it is predicated by the phrase “to the maximum extent practicable.” In this case, it is likely that institutions could interpret this command as offering some flexibility.

In general, it is vital to carefully read the language of the statute, determine whether certain actions are optional or mandatory, and then design a plan that is compliant.

Most of the laws are written as a way to foster and incentivize the use of OER, low-cost, and no-cost course markings. For example, mandates from Texas and Washington are designed to encourage faculty to mark courses appropriately and to choose open materials for their courses. Most schools are willing to make changes, and as of 2019, no institution had been publicly penalized for not adhering to the mandate implementation



timeline as designated by their legislature. OER, low-cost, and no-cost course markings are generally seen as positive approaches to lowering the cost of higher education.

#### **STEP 4: DETERMINE WHO IS IN CHARGE OF OVERSIGHT AND IMPLEMENTATION**

After discerning the various requirements of the relevant statute, the college or university administration has at least two key roles in ensuring the course marking process is successful. These roles involve assigning who will assure compliance with the pertinent statutes, and who will educate key stakeholders on campus regarding the statutory mandates—including the why, when, and how compliance must be completed.

Responsibility for compliance may often fall to the provost or chief academic officer, who is in a position to communicate the requirements under the law with instructors, information technology personnel, the campus store, and other key stakeholders. The provost can confirm that any campus-level implementation procedures are communicated to instructors in ways that are respectful of academic freedom. When and how to involve other campus partners is further explored in Part II (Stakeholders) and Part IV (Branding and Communications).

Once the terminology and the implementation of course markings has been decided and adopted, it is important that campus stakeholders are educated about the process. Faculty and staff may need guidance on which materials need to be marked and how to submit the relevant information. Offices charged with implementation, such as the registrar and the campus store, need to understand what adjustments are needed for their technical systems and prepare to answer questions accurately and consistently. Finally, students need to understand what these markings mean, how it affects their course load and finances, and how to search for open and affordable courses in their

registration system. Each of these factors are explored in Chapter 4 (Students).

**STEP 5: FORMALIZE LOCAL INTERPRETATIONS**

State mandates often leave many details up to individual campuses to interpret, and therefore many decisions need to be made at the local level in order to translate high-level instructions into local actions.

This is particularly true in terms of definitions that are not specified in statute and types of materials that are required to be marked. OER, low-cost, and no-cost are *not* interchangeable terms. OER concerns the material’s copyright permissions, while low-cost and no-cost concern the price at which the material is made available to students. Therefore, depending on legislative language, it may be possible for a course or material to fall into multiple marking categories based on their cost or copyright license. Six possible categories are illustrated in the table below.

	No-Cost	Low-Cost	High-Cost
Open	OER: Materials are openly licensed and free of cost and access barriers.	Materials are openly licensed and free of cost and access barriers in at least one form. Cost may be related to printing services or add-ons.	Often does not apply.
Not Open	Materials are free for students to access, but are subject to copyright restrictions.	Materials have some cost associated with access, and are subject to copyright restrictions. Can fall under the guise of “inclusive access.”	Materials have high costs associated with access, and are subject to copyright restrictions.

The case studies in Part VII illustrate a variety of approaches to marking and terminology. Some institutions only implement one label that encompasses all OER, no-cost, and low-cost materials, whereas others implement multiple labels that distinguish between levels of cost and/or whether materials are open. For any kind of marking, it is important to ensure that the

terminology is accurate based on the types of materials it marks. For example, a campus should label something OER only if it intends to distinguish materials that are open from those that are not.

Portland Community College offers an example of local policy decisions to implement course marking in response to the statewide mandate for public institutions (Oregon House Bill 2871 2015). Following the bill's passage in the summer of 2015, the library OER steering committee took charge of overseeing implementation. The steering committee ultimately published an FAQ outlining the course schedule marking requirement:

Oregon colleges and universities are required to “prominently designate courses whose course materials exclusively consist of open or free textbooks or other low-cost or no-cost course materials” at the point of registration. In our online schedule, PCC will use 2 designations for courses with: \$0 required costs and \$40 or under required costs (Portland Community College 2016).

Local decisions can have a large impact on how policies are implemented. While HB 2871 was written as an OER course marking mandate, the college's local interpretation does not involve distinguishing materials based on their copyright permissions. Like many institutions, Portland Community College based their marking only on the cost of materials. The college also made a local determination to define low-cost as \$40, as a threshold was not specified in Oregon's statute. Mt. Hood Community College offers a detailed exploration of how another institution subject to HB 2871 developed its course marking practices, such as including student government input, and using two cost designations.



## CHAPTER 3.

### INSTITUTIONAL POLICY

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State mandates are not the only way that open and affordable **course marking** practices arise. Institutional-level policy can initiate or influence course marking practices, and its implementation can even preempt the need for regulation by the state. Adoption of institutional policy may be top-down, such as from a state system office, or it may be driven by local factors. This chapter will explore institutional policy at different levels. For the purposes of this chapter, we will use the term “policy” loosely to apply to any framework that guides action, whether that is a formal institutional policy, published guidelines, or technical changes to systems and forms. We will explore examples of how institutional policies come about and some common areas for consideration.

#### LOCALLY DRIVEN POLICY

State mandates are not required to prompt open and affordable course markings. In fact, the first institutions to adopt course marking policies did so voluntarily. Maricopa County Community College District is widely recognized as the first college system to incorporate a search functionality for students to filter offerings on the course schedule based on no-cost or low-cost materials status. The district’s policy, adopted in 2014, arose from recognition that students were already choosing

courses based on textbook costs, using the information made available in the course schedule under federal textbook price disclosure requirements. The district simply decided to make the search for this information easier on students. A profile in *Inside Higher Ed* states

[A]dministrators knew that students were mining the course schedule for classes that use OER materials, so they created a highly visible search filter that allowed learners to easily see which courses had no-cost and low-cost materials. (Goodman 2017)

The case studies included in Part VII offer multiple examples of locally driven policies. Nicolet College, for example, adopted course marking practices out of a mandate from the college president to explore OER initiatives. Multiple institutions, including Central Virginia Community College, Houston Community College, and Kwantlen Polytechnic University, adopted course marking alongside efforts to establish **zero textbook cost (ZTC)** degree pathways, or **Z-Degrees**, as a practical means of helping students identify which courses participate. Locally driven policies may be influenced by larger efforts, such as college affordability initiatives or participation in national projects, such as **Achieving the Dream's** OER Degree Initiative, a program that seeks to boost college access and completion through the redesign of courses and degree programs by replacing proprietary textbooks with **open educational resources (OER)**.

## STATE-SYSTEM-LEVEL POLICY

Another avenue for the adoption of course marking policies, in addition to state mandates and local initiatives, are policies driven at the public university system level. Here the system level refers to a number of campuses represented in a state consortium. For example, the State University of New York (SUNY) is a system of campuses across the state of New York and decisions made at the SUNY system level impact all 64 campuses

within. While not grounded in law, system-wide policies often have a similar effect at prompting institutions to initiate compliance.

For example, the University System of Georgia Board of Regents as part of the chancellor's strategic priority for Affordable Learning Georgia (ALG) recommended a course marking requirement to begin in the 2018/19 academic year. The course marking requirement is being implemented with support from ALG, which has formalized the policy through two avenues: an online set of administrative guidelines and a set of technical specifications for implementation in Banner.

In Fall 2018, University System of Georgia (USG) institutions will be required to prominently designate sections of courses whose course materials exclusively consist of no-cost (open or free textbooks) or low-cost course materials at the point of registration. (Affordable Learning Georgia 2020)

Another system-level example is the Connecticut State College and University System (CSCU), which represents 17 state institutions. The system is piloting a system-wide marking policy for "No or Low Cost (NoLo)" text-based course materials. While marking is based only on cost, the communications about the policy frame it as part of the system's OER efforts as NoLo materials are typically OER. Some of the 17 CSCU campuses had already implemented NoLo markings voluntarily before the policy was adopted. A common requirement across all campuses has the potential to streamline implementation. According to the system's NoLo information website,

Courses marked as "NoLo" contain text-based materials that are no cost or low cost, and will not exceed \$40. Check course descriptions for the "NoLo" tag to take advantage. NoLo = Total Course Materials <= \$40. College and course participation may vary. (CSCU Open Educational Resources, n.d.)

The case studies for both the City University of New York and

the State University of New York offer explorations of university system-level roll-outs. Both of these examples were driven from the system level, but had some connection to large state-level investments in OER from the New York governor's office. While no state law was attached to govern implementation of this funding, the systems adopted course marking as one pathway to implementation of the broader goal concerning textbook affordability.

## **IMPLEMENTATION**

As open and affordable resource use continues to grow and evolve, it is important for institutions to respond accordingly. Even the best written policy with all factors of an institution's culture referenced, does nothing without implementation. The institution's community and administration need to understand why open and affordable resources use is important and how course markings align with the institution's mission and vision. Implementation often faces challenges such as awareness, discoverability, usability, and incentives. It is advisable for institutions to invest in awareness-raising activities among their local and regional government officials, other academics, and other key stakeholders to explore the emerging legal, economic, and educational issues involved with open and affordable resource marking and usage—whether or not it is in response to a legal mandate.

Policy implementation intersects with many of the steps that are explored throughout this book. Faculty and staff need guidance on how to make course marking decisions related to their materials and their courses overall. They need to understand the differences between open, low-cost, and no-cost materials. Offices dealing with marked courses, such as the office of the registrar and the campus bookstore need to be educated on how to work with their individual technical systems so proper labels are displayed and searchable. They also need to be trained in how



to answer questions accurately and consistently. Finally, students need to understand what these markings mean—for their course load and their finances—and how to search for various courses in their registration system. Engagement and understanding is the key to success, which is explored in Part II (Stakeholders).



## PART II.

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# STAKEHOLDERS

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Collaborating with campus stakeholders is vital to creating a campus culture that recognizes the value of open and affordable resources. Several campus stakeholders are key partners in establishing open and affordable **course marking** initiatives specifically. A number of stakeholders may be hesitant to implement open and affordable resource markings in the **schedule of classes** as a result of miscommunication or a lack of information. Thus, both identifying key campus stakeholders and having well-formulated, holistic talking points about the benefits of open and affordable course markings is important.

This section introduces a variety of stakeholders, starting with Chapter 4 (Students), which is dedicated to the main beneficiaries of most course marking efforts. Chapter 5 (Other Stakeholders) presents key considerations for introducing open and affordable course markings to each non-student stakeholder group. Chapter 6 (Talking Points) outlines benefits and common misconceptions, which advocates of course marking will need to address in order to implement them on their campus.



## CHAPTER 4.

### STUDENTS

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Open and affordable **course markings** are grounded in the idea of transparently communicating course material costs to students so they can make informed decisions when enrolling in classes. Enabling student agency is an important step in increasing the potential for students to succeed in their academic and professional careers. This chapter explores the role of student agency in higher education and opportunities for involving students in course marking initiatives.

<b>Context</b>	The main user group of any course marking endeavor as they employ the open and affordable course marking system throughout their registration process. Use course markings to help make educated decisions about which classes to enroll in and the potential financial impact of those classes' course materials.
<b>Opportunities</b>	Students can assist with building more meaningful and effective markings via beta testing and focus groups. Student interest may also help with getting other stakeholders on board.
<b>Challenges</b>	Students may not be aware of the new markings or have the time or desire to explore for additional information when focusing on registration, which may be a stressful time. Outreach is especially important to ensure students are aware of the new markings, what they mean, and how to use them. They also may not be aware of OER or how to access the materials, so education about the materials themselves should be done in tandem.
<b>Noteworthy</b>	As the main beneficiary of any course marking initiative, students may be able to rally support for course marking initiatives and OER generally in ways that faculty and staff cannot. Engaging students in discussions about course marking can be a useful entry for having more extensive conversations with them about course material costs and the benefits of OER.

## STUDENT AGENCY

“Agency,” broadly defined, relates to “the socioculturally mediated capacity to act” (Ahearn 2001). Literature on student agency in education tends to focus on agency as empowerment and choice in classroom contexts, specifically as it relates to the role students play in their own learning. For example, Lindgren and McDaniel define agency as “the power of the individual to choose what happens next” and discuss it in the context of a nonlinear pathway through an online learning environment (2012). However, George Kuh and colleagues extend students’ “responsibility for their own learning” beyond the classroom in *Student Success in College*, including an example from Evergreen State College of students contributing to the development of courses and program themes by offering feedback on curricular proposals posted to public spaces (2005, 167-68). Student advocates also cite agency as a benefit of **open educational resources (OER)**, pointing to the flexibility students frequently

experience with OER in making format and access decisions in contrast with the increasing rigidity of the commercial resource market.

For the purposes of this book, the concept of agency also extends to the capacity of students to make informed enrollment decisions. Most institutions require students to take specific numbers of credits and types of courses to meet general education, major, and program-specific requirements in order to graduate. Factors such as complex course sequencing, prerequisites, and the number and frequency of course offerings can make navigating these requirements difficult, even for the most determined and organized student. Academic advisers, registrars, and other student affairs professionals create tools and use **student information systems (SIS)** or other products to compile relevant information to simplify the process for students.

Course markings support students in planning their daily schedules by allowing them to filter by the mode of delivery (e.g., face-to-face, hybrid, online), instructor of record, campus location, course title, class times and dates, and academic session. The ready availability of this information allows students to find courses that meet major, program, or graduation requirements. Some course markings indicate that courses meet specific requirements, such as prerequisites or corequisites, honors, capstone, writing intensive, oral communication, research intensive, diversity, or service learning courses. Incorporating pricing information, or filters for discovering courses that use open or affordable course materials, furthers student agency by enabling course-level decision-making that accounts for actual costs, individual budgets, and financial need.

## **STUDENT OUTREACH**

As the main beneficiary of open and affordable course marking

initiatives, students may be involved in the call for implementing such markings on campus. According to a 2018 report for the Oregon Higher Education Coordinating Commission, over 60% of the approximately 10,000 university and community college students surveyed noted interest in course designations for OER (Freed et al. 2018). At some schools, for example, Kansas State University, students may even lead the request for open and affordable markings and may need support from other stakeholders to operationalize their ideas.

The Oregon report further reveals that most students gained awareness of open and affordable resources through their instructor. However, it notes that some instructors do not post course lists prior to the registration deadlines (Freed et al. 2018). The report recommends several practices to increase student awareness, many of which center on marketing and communication to engage this stakeholder group. For example, the report suggests having a recognizable icon (with explanation where appropriate) for effective branding everywhere students search for classes and course materials. This should incorporate an icon or phrase that is easily understood, not simply “OER,” because students don’t always comprehend that designation without explanation (Freed et al. 2018). Other considerations are explored in Section IV (Branding and Communication).

Even if other stakeholders are leading the development of open and affordable course markings, including students in the discussion is still fundamental. Because course marking allows students to search, sort, and limit each semester, quarter, or term’s listing of courses based on a particular marking, student input on the marking—as well as general system features—is integral. Once student stakeholders are more systematically involved in the course marking process, they can also provide feedback on the needs and concerns of the student body regarding changes intended to benefit them. One key area for student involvement is in setting cost thresholds for markings



labeled as low cost or affordable, as only students can speak to what these terms mean to them. A survey of over 10,000 students at 34 colleges in the Washington Community and Technical College system (fig. 4.1) showed that \$50 or less was the most common choice (22%) as a “reasonable” cost to pay for all required materials in a single class. This was followed by \$30 (18%) and \$40 (13%). It is worth noting, however, that students did not have the option to select a value lower than \$30.

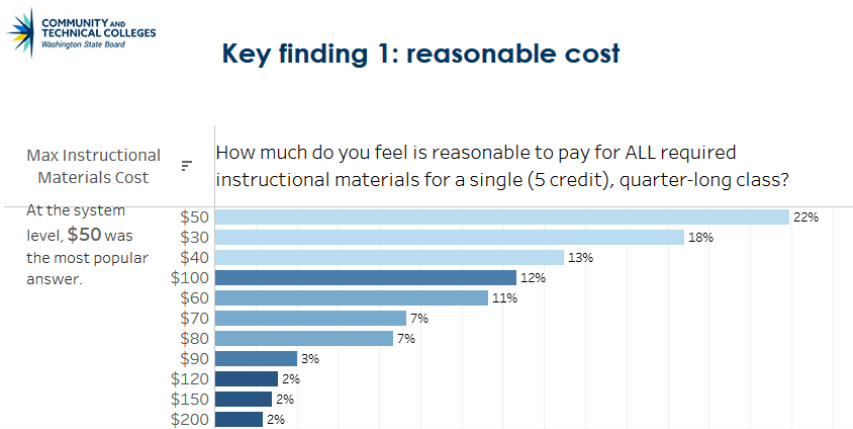


Figure 4.1: Washington State Board Community and Technical Colleges student survey responses regarding “reasonable cost”

## STUDENT ORGANIZATIONS

Advocates frequently turn to student governments when seeking student leadership and feedback on OER initiatives. Student government representatives are elected by the student body and can have an important voice in shaping policy and practices on college and university campuses. These representatives are typically tasked with listening to and representing the student body, serving as an appointed member for other campus organizations or committees, and fostering engagement and connection between students and the institution. Many university systems also ask student government representatives to serve on system-wide advisory councils, where they can be

powerful ambassadors for open and affordable resource initiatives more broadly. There are numerous examples of students promoting, funding, and rewarding use of OER, as well as a growing number of guides to help shape student involvement. For example, a *Student Government Toolkit* on textbook affordability published by the Open Textbook Alliance advises students on running a textbook campaign, advocating for policy changes, and rallying support in various contexts (2016). Though the resource does not discuss course markings specifically, many of the recommendations apply to conversations about price transparency during registration. The *OER Student Toolkit* published by BCcampus explores many of the same themes in a Canadian context (Munro, Omassi, and Yano 2016).

Additionally, student governments and other student organizations can be effective change agents with access to policy makers and influence on proposed legislation, particularly at the state level. For example, the Maryland Public Interest Research Group has a student funded and directed chapter at the University of Maryland College Park that provided testimony in early 2020 in support of Maryland House Bill 318. The bill proposed that all institutions in the University System of Maryland “develop a method to clearly and conspicuously show students in the online course catalog which courses use free digital materials” (Cailyn Nagle, email to editor, February 11, 2020). The testimony presented the story of a student whose graduation date was delayed and debt increased due to the cost of course materials; it argues for a future that is free of financial barriers that can negatively impact student success and the related need to provide clear and comprehensive cost information to students at the time they register for classes.

## CHAPTER 5.

### OTHER STAKEHOLDERS

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This chapter describes stakeholders who play a vital role in **course marking** initiatives, with each stakeholder's context simplified to be most relevant to their general concerns and attitudes about open and affordable course markings. Stakeholders are covered in the following sections, organized alphabetically: Administration, Advisers, Campus Stores, Information Technology, Institutional Research Department, Instructional Designers, Instructors, Librarians, Marketing and Communication, Recruitment and Advancement, and the Registrar. It would benefit the team leading the course marking initiative to have a comprehensive understanding of the strategic goals of each stakeholder group. However, some stakeholders may fall into multiple categories and therefore may be key to call upon. Additionally, some stakeholder groups will form natural partnerships. Leveraging these synergies can help course marking initiatives to be more successful.

## ADMINISTRATION

<b>Context</b>	Administrators are tasked with overseeing holistic institutional goals. The group is responsible for complying with course marking mandates and is essential for resolving cross-departmental course marking concerns.
<b>Opportunities</b>	Can facilitate buy-in across departments and units, either through incentives or compliance measures. Course marking initiatives can inspire them to learn about and invest in open and affordable course materials generally.
<b>Challenges</b>	Limited time. Often works as a generalist and may not have in-depth knowledge about open or affordable course content or course marking. May be wary of the institutional cost of course marking and see it as a burden. May require discussions on Return on Investment for open strategies. May be concerned about potential political challenges from faculty.
<b>Noteworthy</b>	Must engage with this group (or empower others to engage with them) to be successful, as they control resources and strategic direction.
<b>Potential Partners</b>	All stakeholders.

As the leader and visionary of their institutions, college and university presidents play a key role in leading course marking initiatives. Generally, they report to the institution's board of trustees, providing them with background on key initiatives and working to decide on strategy and direction. Administrative vice presidents, provosts, deans, and coordinators work in a concerted effort toward the institution's mission, vision, and strategic plan. Administrators can facilitate buy-in across departments by creating incentives for faculty to mark courses or require specific units to oversee the implementation of course marking endeavors. Effective administration depends on several variables, including the strength of the institution's leadership and the sense of purpose imbued within the college's goals (Cohen, Brawer, and Kisker 2014; Eckel and Kezar 2016).

Open and affordable course marking endeavors are cross-departmental, often spanning several academic and student success units. They often require administrative support and

effort in order to coordinate work towards a common goal. For example, key stakeholders such as advising teams, instructors, registrar, instructional designers, and librarians are in a variety of units. Recently, the establishment of departments of academic excellence have begun overseeing interdepartment student success initiatives, which can be closely tied to **open educational resources (OER)** (Cromwell 2017). These departments support student success through a variety of services, such as academic tutoring or advising. Gaining administrator buy-in early is essential to motivating collaboration between these groups, troubleshooting barriers, and operationalizing course marking successfully.

Administration commonly oversees the implementation of any course marking mandate when one exists. As a result, administrators often communicate expectations for broad campus initiatives across departments to meet compliance standards. This often involves recognizing that statewide mandates can fold into institutional strategic goals.

Perhaps the most difficult challenge related to getting buy-in from administrators is the issue of cost. The institutional cost of adding open and affordable course materials markings is not well understood, and the calculation of such costs is complicated by a scarcity of models and the great variation from institution to institution of how initiatives are implemented. As discussed in several of the examples in Part VII (Case Studies), the responsibility for course marking is often added to existing positions, often not requiring additional funding for staff but putting additional workload on existing staff, possibly leading to burnout or turnover. It is still unclear how much funding is needed to implement and sustain course markings and which program(s) those new to markings should emulate. Preparation for discussing course marking with administrators should include estimating the general cost of the initiative as discussed in Chapter 7 (Preparing for Implementation) and curating

concise and powerful talking points about transparency and affordability.

## ADVISERS

<b>Context</b>	Entity that support students in registering for courses and completing requirements. May be faculty advisers or staff in an advising department.
<b>Opportunities</b>	Familiar with courses offered and degree requirements. Their close relationship with students means that they are knowledgeable of course sequencing and students' processes for selecting courses, aiding in identifying challenges related to course marking.
<b>Challenges</b>	The constant changes in course offerings may be an extra burden for advisers to monitor. Also can be difficult since marking takes place on the section rather than course level. If they are not involved in the marking process, they may unintentionally circulate outdated information.
<b>Noteworthy</b>	Strong advocates of students' needs and generally have a good understanding of student registration behaviors. May have familiarity with courses using OER or affordable course materials.
<b>Potential Partners</b>	Students, registrar, marking and communications, instructors, and information technology.

Institutions can differ in their advising practices. In some cases, advisers are exclusively faculty and in other cases, this role is filled by staff trained in advising. Regardless of the scenario, the reach of a successful open and affordable course marking initiative requires that advisers are aware of the marking and informed about the meaning of different designations. Thus, involving advisers in course marking planning and including them in decisions about how to designate open and affordable courses is paramount. Ideally, advisers would be part of a feedback loop, periodically providing the course marking initiative with information about what does or does not make sense to students. Advisers might also help extend a course marking endeavor into a larger initiative to create degrees or curriculum pathways that utilize only open or affordable course materials, as advisers are already knowledgeable about

curriculum choices students make and which courses use open and affordable materials.

Each new semester can pose new challenges for helping advisers engage with course markings. Challenges can arise from turnover and a lack of updated information, including schedules or issues related to software. Lower Columbia College's case study provides one example of how advisers might circulate outdated information if they are not updated on changes each semester. Keeping advisers in the loop and giving them clear, concise, and timely information is essential as there is potential for them to become champions in sharing information about course markings to faculty.

## CAMPUS STORES

<b>Context</b>	Supports institution compliance with HEOA. Involved in instructors' course materials selection process.
<b>Opportunities</b>	Vast knowledge of instructors' textbook choices, including which instructors are using e-versions, older editions, and low-cost materials. May oversee the course material reporting process. Potential new revenue stream with the implementation of a print-on-demand service.
<b>Challenges</b>	Issues with instructors not communicating course material choices, especially in a timely manner. May feel pressure to continue to sell commercial textbooks to support revenue, depending on context. May perceive the loss of revenue with OER materials.
<b>Noteworthy</b>	May have a running list of instructors' preferences and open and affordable resource adoptions, which could jumpstart a course marking initiative.
<b>Potential Partners</b>	Registrar, instructors, instructional designers, and librarians.

Campus stores, sometimes referred to as college bookstores, are key stakeholders in establishing open and affordable course marking initiatives. The 2008 **Higher Education Opportunity Act** (HEOA) provided specific requirements to bookstores related to transparency of materials costs, including the availability of course materials costs during registration periods

(U.S. Department of Education 2008). This forced campus stores to list textbook prices not only on their shelves, but also digitally. With open and affordable course materials being used in the classroom, campus stores are partnering with instructors to purchase print OER materials and adding OER designations on their shelves and online portals. Their work with instructors primes them to be familiar with the type of course materials being used as well as ideal partners in open and affordable course marking initiatives. For example, they may already have a running list of instructors' preferences and open and affordable resource adoptions, which could jump start a course marking initiative.

To help ensure compliance with the HEOA, campus stores may oversee the course material reporting process by being involved in textbook selections. Full compliance with HEOA may be difficult as instructors may not communicate course material selections in a timely manner which can affect the accuracy of open and affordable course markings. Even if instructors' compliance is under 100%, store staff are generally knowledgeable about the amount of time it takes instructors to select materials and their process, making them integral partners.

Generally, campus stores have also been concerned with meeting students' budgetary limits, utilizing used and rental books as a strategy for competing with discount retailers such as Amazon. They are generally open to textbook affordability programs and working with the library and other departments (Bell 2017). These partnerships will likely be aided by identifying shared values or goals, such as a focus on student success (Cummings-Sauls et al. 2018). In the case study of Nicolet College, the campus store manager was the driving force behind their initiative. Convening an advisory committee of faculty, library staff, instructional designers, and student services, the campus store



manager was able to pilot and build an effective OER program by working with the registrar on course designations.

INFORMATION TECHNOLOGY

Context	Information technology is responsible for managing the systems, software, and technology at institutions.
Opportunities	Familiarity with the customization capabilities and limitations of systems that may be used in course markings. Potentially able to support programming required for customization. May be able to design a prototype that can be shared with other stakeholders.
Challenges	Very limited time. Works across the institution to provide support to all departments. May not have the time to dedicate staff support. Additionally, may not see course marking as a priority over other systems.
Noteworthy	Engagement with information technology is key to a successful initiative. Staff in this department may support the technical implementation along with the required maintenance.
Potential Partners	Registrar, campus stores, instructors, advisers, instructional designers, librarians, and institutional research department.

Information technology departments are responsible for reviewing, developing and/or implementing, and maintaining various systems across the institution. Their familiarity with current software may help in identifying the connections across systems; for example, they may be able to identify where and how institutional data is stored and how it is used to populate learning management systems or course schedules. The department will likely be responsible for implementing open and affordable course markings in the relevant systems, either customizing in-house or coordinating with external vendors.

The information technology department is in high demand at the university. Overseeing institution software, including learning management systems, and providing troubleshooting support can leave limited time for additional projects. While there may be interest in course marking, the workload and availability of staff time may limit investment in this new project. However, engagement with this stakeholder group is key to the success

of course marking initiatives. It may help to offer engagement in stages, starting with providing consultations on the general capability of institutional systems and, later, assisting with customization.

## INSTITUTIONAL RESEARCH DEPARTMENT

<b>Context</b>	Entity that oversees ethical preparation and execution of research on campus. Essential for making data-informed decisions about course marking effectiveness and accessing related data on student registration, GPA, and course load.
<b>Opportunities</b>	Familiarity with data collection, storage, and preservation. May assist with navigating data privacy requirements like FERPA. Helpful in performing studies gathered from course marking data (e.g. enrollment impact, grade impact).
<b>Challenges</b>	IR departments are often burdened with a high workload. Course marking may not be seen as a priority.
<b>Noteworthy</b>	Working with the IR department can leverage research to advance OER generally. Course marking assessment can act as an introduction to more robust assessment projects related to student affordability and transparency.
<b>Potential Partners</b>	Information technology, administration, marketing and communications, and recruitment and advancement.

Establishing good communication and collaboration with the institutional research (IR) department is essential to the assessment of open and affordable course markings. The IR department oversees ethical preparation and execution of research on campus. They are often able to help collect data related to student enrollment or course outcomes and, if needed, can also develop new tools or database options to isolate and identify registration data. This data can create compelling pieces of evidence that speak to student academic success, retention, and persistence and influence administrative decisions such as iterating on and improving a course marking initiative, funding for instructors' OER efforts broadly, and/or the need for additional staff. Partnering with IR early on can be helpful in identifying which data can be collected, ensuring that the data collected is valid and meaningful, and using that data in these

communications with stakeholders, especially administrators. However, IR departments have a heavy workload and working with course marking initiatives to collect such data may not be a priority. Collaboration and shared responsibility between other departments or OER committees in collecting course marking data may be helpful for IR departments.

Charged with collecting, maintaining, and disseminating institution-related information and data, the IR department is also well versed in federal, state, and institutional policies related to privacy and data, such as the Family Educational Rights and Privacy Act. As such, IR is a key partner in developing studies or sharing data collected from open and affordable course markings, which contain information about students.

Working with the IR department can leverage personal and institutional research to advance OER. Data collected from course marking assessment can act as an introduction to more robust assessment projects related to student affordability and transparency. For example, throughout the process of drafting, implementing, and reviewing a survey that attempts to assess OER impact, IR staff can support efforts to make a valid and reliable instrument.

## INSTRUCTIONAL DESIGNERS

<b>Context</b>	Provide instructional support for campus by assisting instructors with designing and assessing learning outcomes, developing modules and assignments, creating the foundation for entire courses, and/or troubleshooting issues with learning software.
<b>Opportunities</b>	Work closely with instructors on course design and can leverage these opportunities to communicate course marking policies and procedures to increase timely and accurate reporting of course resources. Often familiar with instruction across disciplines and have a macro-level of teaching practices. Instructional designers can connect faculty interested in open practices to those that already use them in their curriculum. Due to extensive connections with faculty, they may facilitate feedback or testimonials from faculty using OER or incorporating open practices.
<b>Challenges</b>	Offices housing instructional designers are often understaffed, which can exasperate feeling overburdened and fatigued by the need to stay current on new software or teaching practices they are required to support; OER initiatives may contribute to this burden.
<b>Noteworthy</b>	Comprehensive integration of open practices into campus culture requires buy-in and support from instructional designers.
<b>Potential Partners</b>	instructors, librarians, students, information technology, institutional research department, campus stores, and advisers.

Instructional designers support the creation of courses by designing and assessing learning outcomes, developing modules and learning materials, and troubleshooting issues with learning software. They are often involved with the development of online courses but can also be involved in the creation of in-person or hybrid classes. While the breadth and depth of their involvement in courses will vary by campus, instructional designers are typically knowledgeable about the courses offered at an institution, are aware of the resources individual instructors have adopted in their courses, and sometimes have significant expertise in usability and accessibility of online tools.

Because of their unique involvement with course creation across an institution, instructional designers can advocate for the use of open and affordable resources in the classroom, especially at the start of a course redesign process when instructors may be

more receptive to replacing course materials. Correspondingly, they can encourage faculty to report such resource use when it occurs. Instructional designers may also be familiar with external forces that influence course creation or changes. This awareness gives instructional designers a unique advantage to connect open practices to new or revised course goals. Recognizing instructional design interventions as a communication opportunity for course marking initiatives can widen the reach of marketing campaigns and increase compliance with reporting requirements.

In some cases, OER initiatives originate from within teaching and learning centers or instructional design units. In these situations, designers may find themselves leading course marking efforts or supplying data about which courses use materials that qualify for a marking. Units housing instructional designers may be overburdened with a high volume of support, and open and affordable course marking initiatives may add an additional challenge. It is important to encourage the support of instructional designers so that they can communicate reporting needs to the instructors they assist without overwhelming them. Instructional designers may also collaborate with faculty to collect data on student use and impact and translate these results to reporting of student outcomes.

## INSTRUCTORS

<b>Context</b>	Most instructors are responsible for selecting course materials (exceptions include materials selected by curriculum teams). Thus, they control the usage of open and affordable course content in the classroom and communicating such usage for marking in the schedule, whether directly or indirectly through their departments or the registrar.
<b>Opportunities</b>	Instructors already report their course materials choices, so ensuring that the new process is easy for them could increase support for course markings. Additionally, instructors generally empathize with the need to decrease student costs and transparency for students. Possibility for increased enrollment in sections that indicate no or low course materials costs. Potential for instructors to incorporate open practices in future courses.
<b>Challenges</b>	Instructors may fear that students will avoid classes without the open or affordable course marking, which they may feel threatens their academic freedom. Course markings can also be perceived as a workload burden by some instructors.
<b>Noteworthy</b>	Not only must instructors buy-in to the new course marking process, but they must also buy-in to the use of open and affordable course materials. Support for the latter will lay a promising foundation for the former.
<b>Potential Partners</b>	Students, advisers, instructional designers, librarians, and campus stores.

Instructors include lecturers, faculty members, adjunct instructors, teaching graduate students, or anyone else involved in teaching and selecting materials for a particular course. Many instructors empathize with the need to decrease student costs and increase transparency for students. Since they are responsible for selecting materials and designating open and affordable materials correctly, their support is essential in any course markings initiative.

Instructors may have several concerns related to either open and affordable course materials or the process of marking courses. One common concern is that if they do not currently use open or affordable course materials, students may not select their course or section. With often dwindling enrollments and fewer full-time faculty appointments, competition for course enrollments

and positive course evaluations from students can be perceived as influencing a faculty member's status or advancement in the tenure process. To address this concern, it may be helpful to present data or show examples from other institutions about how students select courses when these markings are present. Related to this, some instructors may feel that there are no low- or no-cost materials available in their discipline or niche (Gallant and Lasseter 2018). This is particularly relevant in contexts where a low-cost threshold (e.g., \$40) has been designated campus-wide but the discipline the instructor is working in has an average course material cost of \$200+ and/or a lack of relevant OER options. Working with instructors to understand common disciplinary costs and presenting a spectrum of solutions, which might include library-licensed content and e-texts in addition to OER, is paramount. Finally, these concerns may lead to larger concerns about academic freedom of faculty. Emphasizing the motivations of student agency and informed decision making, while reinforcing that faculty can still make choices about materials is important. No faculty is being forced to use open and affordable course content; all still have the autonomy to select which resources are best for their courses.

Apart from faculty concerns about the content itself, course marking can be perceived as a workload burden by some instructors. With growing course loads and service commitments, instructors may feel overwhelmed by another administrative duty. Course marking advocates can utilize a few strategies to assuage these fears. First and foremost, instructors should be represented in the group that plans and executes the course marking initiative so that they can identify parts of the process that may be infeasible. Involving instructors in beta testing the course marking system is another useful strategy. Academic staff should have buy-in on new education initiatives because they are responsible for implementing the changes in the curriculum and conducting course assessments. Mt. Hood

Community College used this approach when establishing OER markings in their **schedule of classes**. Preparing informational materials or holding general discussions on the topic may also help with gaining buy-in and addressing instructors' concerns.

Ultimately, instructors must support the course markings and open and affordable course materials in order for the course markings initiative to be successful. Any course marking initiative should prioritize making the process for using and reporting open and affordable course materials easy and streamlined to assist this stakeholder group.

## LIBRARIANS

<b>Context</b>	Providers of teaching and learning resources, including books, ebooks, databases, and textbook reserves. Often knowledgeable of OER, copyright, and resource acquisition. May be involved in course design and embedded teaching.
<b>Opportunities</b>	Already do cross-departmental outreach as part of their work. May be leading a broader OER initiative or know of OER adoption strategies.
<b>Challenges</b>	Reduction of budgets and reduced staff capacity. Instructors' perception of librarians as only content acquisition and not instructional partners.
<b>Noteworthy</b>	May already know of open and affordable adoptions, including the use of library resources. Can help with broader OER outreach.
<b>Potential Partners</b>	Instructors, librarians, students, information technology, institutional research department, campus stores, and advisers.

Uniquely situated in their institutions, librarians cultivate connections with multiple instructional departments by providing textbook reserves, multi-user ebooks used as textbooks, interlibrary loans, online databases, and/or course packets. In addition, librarians are increasingly seen as early advocates, adopters, and coordinators of course materials affordability initiatives owing to their roles in subject content curation, faculty outreach, open access education and promotion, and scholarship sharing and preservation. At the



same time, librarians may experience challenges related to instructors' perceptions of librarians as content managers and not instructional partners. Additional challenges include staffing and budget concerns, which may inhibit the extent of support that can be offered. However, librarians often have firsthand knowledge of what resources instructors require for courses, enabling them to help jump start any course marking initiative.

The library is often a useful partner for reinforcing the educational value of open and affordable resource use and supporting instructors interested in the course marking initiative but unsure of how to adopt open and affordable course content. Librarians also often act as generalists, closely collaborating with a variety of groups—including students—making them key partners in course marking endeavors.

## MARKETING AND COMMUNICATIONS

<b>Context</b>	Responsible for promoting course markings through uniform, easy-to-understand branding and marketing techniques.
<b>Opportunities</b>	Fundamental partner for systematic implementation. Can help with incorporating course marking into recruitment, registration, and advertising initiatives. Increases college branding through icon recognition.
<b>Challenges</b>	Course marking icon has to be incorporated everywhere students access course or course material information. Communication and implementation have to be clear and compelling. May be in high demand or have a high workload and may not be able to prioritize course marking initiative.
<b>Noteworthy</b>	Systematic course marking icons can be an effective tool for building awareness of open and affordable courses more broadly.
<b>Potential Partners</b>	Instructors, students, campus stores, recruitment and advancement, advisers, instructional designers, and librarians.

Good communication and marketing are key to any course marking initiative. Students, advisers, and others using the information for registration will need to understand what the markings are, how to use them, and what they mean, while

instructors and other reporters will need to clearly understand what needs to be marked and how to do so. Thus, clear communication and a good marketing plan will lay the groundwork for a successful initiative.

The marketing and communications department can aid in creating an awareness campaign for course markings, clearly communicating all needed information to relevant stakeholders. This relationship will be an evolving process. It is important to note that marketing and communications departments serve the entire university and thus can have many demands on their time. When collaborating with this stakeholder, make requests early to help ensure that your requirements can be accommodated in relation to the department's workload.

Early in the initiative, marketing may begin to advertise to faculty that this change is forthcoming and to solicit feedback. They may also help develop a course marking symbol or icon that is easily understood and instantly identifiable to students and instructors. The marketing and communications department can craft compelling and easy-to-understand marketing materials about the changes, which can be shared with students and other shareholders across the institution. Ideally, the materials should be customized for each stakeholder group. These materials should be varied and include items like brochures, posters, and online postings. The materials may also include information to help dispel common OER myths or concerns. See Part IV (Branding and Communication) for more comprehensive discussion.

While current stakeholders on campus are the primary audience for the marketing materials, the marketing and communication department can also develop recruitment materials to inform prospective students of the institution's usage of open and affordable materials. A systematic plan of branding and

marketing will help simplify recruitment through increasing brand recognition.

## RECRUITMENT AND ADVANCEMENT

<b>Context</b>	Responsible for promoting the campus and encouraging potential students to apply and enroll. They might also communicate new initiatives to instructors and staff candidates and potential donors.
<b>Opportunities</b>	Sharing the opportunity of a lowered cost of attendance is significant. May be able to use course markings in recruitment material.
<b>Challenges</b>	May not know that open and affordable resources use and/or course marking are assets for their recruitment efforts. May need help answering specific questions about the initiative to be most effective.
<b>Noteworthy</b>	Including this group early can translate to long-term institutional support and buy-in as it directly impacts enrollment and recruitment.
<b>Potential Partners</b>	Marketing and communications, institutional research department, advisers, and administration.

Open and affordable course markings can serve recruitment and advancement efforts well. In budget-constrained times, any mechanism for increasing affordability and transparency and communicating those benefits to potential students is an asset. For example, some institutions, like Kwantlen Polytechnic University, have strategically branded their course material marking initiatives to be more comprehensible by calling them **zero textbook cost (ZTC)** initiatives signaling that students have the option of a zero-cost degree, or **Z-Degree**, path when considering course materials. Clear branding, training on messaging, and punchy data points can help empower recruitment and advancement staff to entice potential students, instructors, and donors.

This group may use open and affordable course designations as a talking point with students specifically, especially if the course schedule and/or catalog is accessible to potential students. Maricopa Community Colleges' Maricopa Millions is a helpful

example of using open and affordable course designations in recruitment material. The Maricopa Millions webpage takes potential students through the process of searching for classes that have been marked as open. This includes filtering to campuses and subjects. The recruitment material also provides additional information and context around the OER programs at the colleges (Maricopa Community Colleges, 2020). University of Maryland University College has also expanded their OER outreach in their recruitment material. While not specifically focused on course designations, University of Maryland University College uses textbook affordability in airport recruitment advertisements (Cangialosi 2018). Early outreach communicates the initiative's value to potential students, and discussion with recruiters may inform marketing materials. Recruiters have a unique perspective on the interests and needs of prospective students that may be missed by other stakeholders.

Engaging this stakeholder early in the course marking process is important as it can translate to long-term institutional support and buy-in as it relates to enrollment and recruitment. This group will need clear marketing materials and support for answering questions related to open and affordable course materials and course markings.

## REGISTRAR

<b>Context</b>	Oversees course scheduling system on campus, collaborating with instructors to provide information on course sequencing and offerings.
<b>Opportunities</b>	As the administrator of the course schedule, this group is a key stakeholder. They are able to discuss how instructors/department heads provide information about courses and may even provide information on how students use the Student Information Systems (SIS).
<b>Challenges</b>	Course markings may add extra work and additional costs for coding and staff time to registrar units, ultimately translating to a burden or new responsibility for this group.
<b>Noteworthy</b>	Providing examples and workflows from other campuses may be helpful for an initial meeting with this group. Present course material markings as a simple addition to the suite of course marking the institution already has.
<b>Potential Partners</b>	Information technology, campus stores, instructors, advisers, and administration.

The registrar is a key stakeholder for adding open and affordable course markings to the course schedule, as their unit often controls the success (or failure) of a course marking initiative. This is particularly true since most workflow for marking will require adding additional work from the registrar's office. If possible, research the institution's **student information system (SIS)** and course schedule software prior to engaging with the registrar. Providing examples of course markings from other campuses using the same system can help with any initial conversations with this group. Framing the conversation as an extension of the course marking work the institution already does—for service learning and honors courses, for example—may make the new initiative a less daunting prospect for registrars.

The registrar's office may be able to share valuable information on an institution's SIS, especially if local systems are customized or developed in house. They also likely have insight and an important role in local processes for course schedule creation and course materials reporting. Registrars should be consulted

early in open and affordable course marking efforts and included in discussions around implementation.

## CHAPTER 6.

### TALKING POINTS

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This chapter is aimed at providing customizable talking points on course marking initiatives that can be adapted to fit the needs of the institution and various stakeholders. The stakeholder groups mentioned in Chapter 5 (Other Stakeholders) will express different levels of investment and interest in supporting open and affordable **course markings**. For some stakeholders course markings are an immediate benefit, empowering them to make informed decisions about courses or allowing them to collect useful data that might further their unit's mission or **open educational resources (OER)** more generally. For others, course markings create additional responsibilities and may be seen as a burden. As such, these stakeholders should be approached strategically. The talking points below summarize benefits and concerns related to course marking initiatives, but may not be exhaustive. Part IV (Branding and Communication) provides additional information on how to customize messages to be most relevant for different stakeholders.

### CUSTOMIZING TALKING POINTS

To be most effective, these talking points should be customized to both local context and audience. Strategies for this customization include

- Utilizing strategic documents, including the institution's mission and vision to point to its commitment to affordability, access, and student agency.
- Gathering information about peer institutions and what they are doing. Have they implemented course markings? How might their guidance inform conversations with stakeholders?
- Gathering information about the **student information system (SIS)** in use. Has customization already been done? This is explored in more detail in Chapter 9 (Student Information Systems).
- Citing research on the effectiveness of affordable course materials, specifically OER. The Open Education Research Group is a useful resource.
- Citing institutional data on student tuition, course material costs, and even student debt. If possible, curate testimony from students on why a course marking initiative might help them.
- Identifying potential allies from the department or organization to discuss planned talking points prior to the main meeting. If possible, discuss potential benefits or concerns that may need to be addressed during the meeting. Adapt or supplement talking points based on this discussion.
- For stakeholder groups, in particular campus departments, identifying strategic priorities and mission and determining ways that course markings can serve those objectives.
- Having a rough idea of what a potential new workflow for marking might look like for stakeholders. Be ready to answer questions about this workflow and be honest about sticking points. The possible impact on processes is explored in Chapter 8 (Processes).



## TALKING POINTS ABOUT BENEFITS:

- The urgency for open and affordable course materials resonates with many students. With the rising cost of attendance (U.S. Department of Education, National Center for Education Statistics 2019) and student debt (Board of Governors of the Federal Reserve System 2019), lifting the burden of textbook costs is an effective way that colleges can support students, encourage success and increase retention.
- Transparency and student agency are core to course marking initiatives. Course markings enable students to know about course material costs sooner, while they still have time to make informed decisions about their course schedule and load. This builds on the **Higher Education Opportunity Act**, which, as discussed in Chapter 1 (State and Federal Legislation), requires course materials cost transparency in a timely manner (U.S. Department of Education 2008). Course markings inherently center student agency, as they are built on the assumption that, when provided enough information, students will make decisions that are right for them and their context.
- Once course markings are in place, these themes of affordability and transparency can be used in recruitment and advancement materials for the institution. Marking open and affordable course materials creates a powerful talking point for attracting new students, **instructors**, and even donors. Potential students browsing the **schedule of classes** will see the markings firsthand, demonstrating that the institution is committed to informed student decision making and affordability. Donors might also be excited about trends in higher education, including both OER and course marking generally, and this initiative will be an important talking point for showcasing how the institution is leading in this area.

- Once course markings are in place, the workflow will be easy to maintain. While there are upfront costs associated with creating the marking and altering related systems and processes, maintenance becomes a regular duty of staff on campus and/or the SIS administrator. This can be seen as both benefit and concern.
- Course marking initiatives are an important piece of raising awareness about student course material costs and OER more broadly. As such, course markings can be used as part of a larger suite of services and resources for lowering student costs.
- Marking open and affordable courses will feed general outreach work already being done with OER and vice versa. As more educators learn about and adopt OER, more classes will receive course markings. As more educators encounter information about course marking, they will ask more questions about open and affordable course materials and why they matter.
- One tangible example is that open and affordable course markings can be used for assessment purposes. There are already examples of how institutions have used course marking to better understand educators' misconceptions about OER and their existing use of open and affordable course materials, including Houston Community College's case study. The case study describes surveying over 2,000 faculty about their use of OER. One finding was confusion among respondents about what OER actually are, leading to discrepancies in course markings. In short, course markings can be used as a mechanism to better understand which departments/ disciplines would be a good candidate for OER outreach.
- Remember that students consider several factors in selecting courses (e.g., word of mouth, websites), with course material cost being only one of these factors.

Open and affordable materials can be one avenue for faculty looking to boost course enrollment.

- The markings may inspire some instructors to adopt open and affordable course materials in their classes. If they want help with this process, there may be existing support at the institution, perhaps in the library, to help them identify and evaluate existing resources or create new materials.

## TALKING POINTS ABOUT CONCERNS

- While the expense of implementing a course marking initiative is not easy to estimate, a lot of work is already included in existing positions (e.g., instructors already select materials for courses, the registrar already enters class information) One way to manage costs is to provide a robust estimate of extra staff time needed. Workflows are already in place for other markings (e.g., service learning, honors, general education) and can be used as a model.
- Instructors are commonly concerned that marking courses as open or affordable will put them or their colleagues at a disadvantage when students enroll. Though this topic has not been formally studied, some have said anecdotally that they do not see this happening in practice. For example, one professor at Tidewater noted that she has observed that students' course decisions "factor in textbook costs just as much even without labels" (Lieberman 2017).
- Several institutions already have course material markings in place. Some states have mandates requiring these markings, with many institutions working toward or in compliance. This means that we can look to our peers for guidance and support.
- Although misconceptions to the contrary will likely exist,

instructors are not required to use open and affordable materials with the new markings. They will continue to be able to select whichever course materials they feel is the best fit for their classes. They are only required to report for marking any courses that use open and affordable materials.

- Implementing course markings can be a long process. It may also be challenging to maintain correct notations for courses that are marked as no cost or low cost. As noted in Houston Community College's case study, effective communication with department chairs is important to accurately mark courses. Campuses can create a maintenance plan to ensure that updates are streamlined and students get correct information.
- There will be upfront costs, including staff costs, when implementing course marking systems. Staff responsible for maintaining the SIS and other relevant technology must participate in meeting discussions. Staff may have concerns about additional duties, so having buy-in from staff and their supervisors is essential.

## PART III.

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### MECHANICS

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Implementing open and affordable courses marking involves a complex array of individuals, all of whom have a variety of duties, and requires the navigation of multiple technical concerns. Consequently, it is impossible to provide an overview that works in all cases or on every campus. However, this section shares potential practices and asks questions that will help each campus find a successful solution, regardless of their unique situation. Though sometimes used interchangeably, the terms **schedule of classes** and **course catalog** represent distinct institutional artifacts. Schedules are updated for each academic period and contain details of course meeting times, instructor names, classroom locations, etc. Catalogs, on the other hand, are updated less frequently. They provide descriptions of all courses offered at the institution and may incorporate policies and procedures that impact students; typically, students are governed by the terms published in the catalog during the semester they first enroll. Schedules and catalogs may be generated from data collected in **student information systems (SIS)**.

Readers can use this section as a general guide on how to plan a strategy for implementing marking open and affordable courses, including preparing for unique contexts through an environmental scan, reviewing processes connected to the SIS, and assessing implementation's impact on institutional procedures and technical systems. The section also includes information on creating a stand-alone list of open and affordable courses.

## CHAPTER 7.

### PREPARING FOR IMPLEMENTATION

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Despite the common end goal of marking open and affordable resource use in the **schedule of classes**, each institution's unique environment requires a unique path of implementation. This chapter provides guidance on understanding one's unique environment as the institution prepares to implement **course markings**.

#### INSTITUTIONAL INITIATIVES

Some institutions utilize a centralized committee or initiative focused on open and affordable course markings to help with the implementation of course markings. These committees are often a part of larger **open educational resources (OER)** campus initiatives, for which implementing course markings is just one task to accomplish. Committees are sometimes composed of one campus unit or, more commonly, representatives from a variety of campus units. Members of these committees typically include individuals from the faculty, information technology (IT) departments, academic affairs, libraries, student government, and many others. Organizing a committee can assist with communication and coordinated action across autonomous departments, especially since so many different stakeholders are involved in course markings.

If a committee is present on campus, it is recommended that they conduct the environmental scan outlined below. At institutions without a centralized committee, the environmental scan should be conducted by those organizing the implementation of open and affordable course markings.

## ENVIRONMENTAL SCAN

Before developing a plan for implementing course markings, an institution must understand its current resources, processes, and needs. The study of institutional technology, staff, and motivations often takes the form of an environmental scan.

During an environmental scan, an organization reviews its internal and external environment to determine opportunities and challenges. When completing an environmental scan related to course markings specifically, a higher education institution should explore:

- Motivations for course markings
- Current course material reporting processes
- Current **student information system (SIS)**
- Staff capabilities and capacity
- Current open and affordable awareness and activity

Exploring these avenues could include talking to stakeholders, reviewing relevant policies and procedures, exploring technical capabilities, and understanding and agreeing upon cost of implementation. The sections below provide additional guidance for how to explore each facet.

Developing a detailed environmental scan will allow institutions to outline a clear path for implementation by understanding current capabilities and assets and identifying needs and gaps to be filled. At the end of the process, institutions should use



the gathered information to formulate answers to the following questions:

- What will the institution be marking? (e.g., low-cost, no-cost, OER, **Z-Degree**)
- How will we represent these markings? (e.g., letter, icon)
- Where will these markings be visible? (e.g., independent list, location in the schedule of classes, searchability function)
- What kind of functionality is important to students' search and course registration process?
- What type of technical changes will be required? Will there be any associated costs?
- Who will oversee the technical implementation?
- Who else will need to be involved in the implementation?
- Who will develop and provide guidance on new course materials reporting processes that emerge?
- What are these new processes?
- Who will oversee the implementation of the new processes?
- What type of impact will this have on workload?
- If assessment or compliance is required, how will it be determined?
- How will new course markings be publicized and how will understanding of the course markings be ensured? Who will take point on such publicity and education?

With a clear understanding of what the institution expects for the final course markings, the likelihood of implementation proceeding smoothly increases.

## MOTIVATIONS FOR COURSE MARKINGS

An institution's motivations for course markings may shape its implementation path. If the initiative is being driven by external pressure, there may be specific guidelines for implementation. For example, Texas's Senate Bill 810 mandates that course markings be not only present in the course schedule, but also searchable. Implementing this search function might make the process different for a Texas school than one in California, where schools are required to include the information only in the course catalog. Part I (Policy) provides additional details. Additionally, legislative mandates could impact the type of designation; for example, Texas requires OER designation specifically, whereas Virginia requires the more general low- or no-cost designation. For more on course marking policy, review Chapter 1 (State and Federal Legislation).

If the motivation is internal, the institution may have more flexibility in shaping the implementation of the course marking based on the needs of the local program. For example, Lower Columbia College wanted to promote OER usage on campus by helping students identify which courses used these types of materials. They opted to create a single sheet flyer listing each class using OER rather than a more detailed technological customization, as the flyer met the small community college's needs and environment.

A combination of policy impetus and local motivation may also drive implementation. A school could be implementing a policy mandate while also using the course markings for data collection or course signaling purposes. For example, Houston Community College developed their specific system for course markings to not only indicate to students which classes used OER, but also enable internal tracking of enrollment and scheduling for their **Z-Degree** courses. The system initially envisioned eventually

developed into a very different system, one which tracks the college's three affordability initiatives.

The motivation for the course markings may change over time and institutions should take an iterative approach. Gauging the initial motivations and hopes for the course markings at time of implementation is important to ensure that these are met the first time around, when the bulk of the work will be completed.

When preparing for implementation, ask:

- Why are we choosing to implement course markings?
  - Is there a policy or funded mandate? If so, are there any requirements for implementation? Is any assessment or reporting for compliance required?
  - Is it requested by administrators? If so, are there any requirements for implementation?
- What are we hoping to achieve with the course markings? What features are needed in the implementation to ensure that we meet these goals?
- Have students articulated any specific requirements or features?

Answering these questions will likely involve discussions with administration and other campus stakeholders. If the institution has an OER or textbook-affordability-focused group—whether preexisting or newly formed to oversee course marking implementation—a discussion about motivations and goals is an

important precursor to any decision-making process. Reflecting on motivations will set goals to revisit when implementation challenges inevitably come up.

## COURSE MATERIAL REPORTING PROCESSES

Each institution has a unique process for enabling instructors to report required course materials and creating the full course schedule each semester. In fact, the former process may differ at a single institution on the department level. This kind of historical context will be invaluable when adjusting processes to incorporate reporting open and affordable resource use in the schedule of classes.

Each institution will have to review current processes before determining how those processes can change to incorporate a new course marking procedure. For some, this change might be easy. For example, Lower Columbia College was able to take advantage of the dual roles of the library's administrative assistant to easily add the designation into their schedule. Conversely, at City University of New York, they originally hoped to have individual campuses mark **zero textbook cost (ZTC)** courses but ultimately decided the process was easier if maintained by their central registrar's office.

When preparing for implementation, ask:

- Who is currently responsible for reporting textbook selections at the section level? (instructor, departments, administrative assistant, etc)
  - Is this consistent across the university or does it vary by department?

- What is the current process for reporting textbook selections?
  - Is this consistent across the university or does it vary by department?
  - What technology/technological processes are involved?
  - What are the workflows for staff who are involved in the process?
- Where are textbook selections reported and consolidated? (e.g., registrar, campus store)
- How are the textbook selections integrated with the schedule of classes in order to make student registration possible?
  - Is this integrated with the textbook reporting processes or is it an additional step? If the latter:
    - What units are involved in this process?
    - What is the current process?
      - What technology/technological processes?
      - What human workflows?

It is important to involve all stakeholders and key campus units in this consideration of processes. The process for reporting course materials and creating the schedule of classes often involve a variety of parties performing interrelated tasks, so not only is the who, where, and how important, but getting

everyone's unique perspective will be invaluable. For example, if instructors report their selections to the campus store, does the campus store share this list with someone on campus for integration with the schedule of classes? How does this integration work? Who is involved? What information is passed between the various parties? An understanding of all these aspects will be needed before planning how to alter these processes to also include open and affordable course use.

It is also important to consider both the technological and human aspects of these processes. When implementing the new course marking, at least one person on campus will be asked to change their workflow, to accommodate adding the extra step of identifying which courses use open and affordable resources. Additionally, the new marking might also require changes to be made to technological workflows. For example, auto-reports generated from the campus store to the registrar's office may need to add fields for open and affordable resource use. Be sure to cover all aspects of processes so any need for modification can be clearly identified.

Chapter 8 (Processes) provides an in-depth review of both course materials reporting and schedule creation processes to help understand local circumstances, answer questions from the environmental scan, and plan for implementation.

## STUDENT INFORMATION SYSTEMS (SIS)

Some institutions may choose to indicate open and affordable resource use through an independent list, gathered through individual instructors sharing information. However, for most institutions, such resource use will be indicated in the central course listing, which is often presented through the **student information system (SIS)**.

Higher education institutions use SIS management software for organizing and tracking student information, from personal

details to financial aid to enrollment data. An SIS enables an institution to have a centralized location to manage student data.

An SIS can perform registration and scheduling functions or can work in conjunction with other software to create the online course schedule. While this book focuses primarily on implementations using the SIS, those institutions which use these systems in conjunction with other course management software will need to include the latter in their considerations.

If course markings will appear in the schedule of classes, it's important to understand the current landscape of the SIS at the institution.

When preparing for implementation, ask:

- What SIS is used on campus?
- Is it used in conjunction with other course management software?
  - If so, how will changes in the SIS impact the other software?
  - Will the other software need updates, as well?
- Which unit runs/maintains the SIS?
- How long has this system been used? Are there any imminent plans for updating or migration?
- What kind of changes can be made to the SIS?
- Has the institution implemented other customizations in the past? If so, what was this process?

Finding the answer to the first question is likely easy. SIS are often used to manage faculty and staff personal information, as well. Checking with the office of the registrar, the records office, or central IT department should be all that is needed to confirm the software used, and in-depth conversations with stakeholders should be able to answer the rest of the questions listed above.

The office of the registrar and central IT department can inform the project in important ways and should be included, especially the unit maintaining the SIS, in conversations about implementation. These stakeholders can speak to capabilities, limitations, and processes while planning the change, making the implementation of open and affordable resource use and the maintenance of such course markings down the road exponentially smoother.

Chapter 9 (Student Information Systems) will provide additional information on SIS customization, including overviews of some of the most popular systems.

## STAFF CAPABILITIES

It is important to also explore how these changes will impact an institution's staff. Here "staff" refers to any employee affiliated with the institution, regardless of rank. Reviewing the SIS and processes will help identify which campus units and, more specifically, staff members are involved with textbook reporting and course schedule generation. But it is also important to ask what these staff members are able to do, both in terms of skill and in terms of capacity. This kind of holistic view of individual staff members involved and their capacity will lead to important conversations about the feasibility and sustainability of the proposed challenges. For example, if there is a robust IT department maintaining an **in-house** SIS system, they will likely be able to take on any alterations in-house. Others may need to work to fill in gaps, perhaps contracting out to the SIS vendor



directly. For example, Mt. Hood Community College found that their SIS did not have the needed functionality and thus coordinated with four other Oregon schools to contract the vendor, Jenzabar, to perform the needed modifications.

Evaluating staffing capabilities and needs will allow for better planning for implementation. It may shape implementation so that it can occur without unnecessarily burdening existing staff.

When preparing for implementation, ask:

- What staff are involved in the processes of textbook reporting and course schedule generation?
- What staff are involved in running the SIS?
- Do they/the institution have the resources to implement technological changes in house?
  - Alternatively, what are the cost-benefits of hiring out to an external vendor?
- Do these staff have the bandwidth (time/effort) to take on additional responsibilities required by the implementation, future maintenance, and new processes?
  - Will additional staffing be required?

## CURRENT OPEN AND AFFORDABLE AWARENESS AND ACTIVITY

Understanding the climate surrounding open and affordable course content at an institution may help shape both implementation and marketing. If awareness of open and affordable course content is little to nonexistent, this may

influence course marking labeling. In these cases, communication and marketing will need to address not only what the new markings are, but also why they are needed. For example, using OER would require education about both the term OER and the new marking. Conversely, if the use of open and affordable course content is widespread, awareness of relevant terminology is likely, as is support for the markings. Thus, education would focus primarily on how to report, mark, or use the new markings. Understanding this climate on campus can help plan for educating stakeholders and identify potential opposition, allies and advocates. For more on the stakeholders involved, review Chapter 5 (Other Stakeholders).

When preparing for implementation, ask:

- Are there any open and affordable related initiatives on campus?
- Are instructors aware of open and affordable course content?
  - What is the perception and attitudes of educators regarding open and affordable course content?
- Are there users of open and affordable course content at the institution?
  - Are they willing to help with the marking initiative? If so, what would their assistance involve? How much of their time and effort are required?
- Are students aware of open and affordable course markings?

- Can student action surrounding OER and/or affordability be leveraged to advocate specifically for course markings?
- Can campus partners, like student government, be invited to contribute to course marking initiatives?

Many course marking initiatives may emerge from the above discussed institutional initiatives, which are already working in this space. If the initiative arises independently or from a different department, partnering with groups interested in open and affordable course content will be helpful not only in assessing the current climate on campus but also in advocating for the new course marking initiative.

## **COSTS OF IMPLEMENTATION**

An exploration of the costs of implementing and sustaining open and affordable course markings is a vital precursor to implementation. While a full understanding of the goals will help shape marking initiatives, the costs are deeply connected to the institution's capabilities. For example, during the environmental scan, additional staffing needs may arise, but the institution may not have funds available to hire additional staff.

When considering costs, it is important to consider not only implementation, but also the long-term sustainability and maintenance of the new course markings. While the initial implementation will have the heaviest apparent costs, due to the changes to the SIS, the impact on course material reporting processes may also have a significant impact on staff workload. Further, the initial plan for course markings may not end up

being the final product. For example, Houston Community College initially planned on marking only low-cost books but advanced through multiple stages of course marking implementation, now tracking low-cost, zero-cost, Z-Degree courses, and First Day/**Inclusive Access** courses. Costs for changes or other ongoing maintenance to the SIS should also be factored into the institution's calculations.

Costs for implementing and sustaining open and affordable course marking initiatives may be hard to calculate concretely as most costs are indirect, such as labor. Institutions should examine the impact that in-kind contributions will have on their infrastructure and labor force. Having a good grasp of all types of costs before implementation will help shape the scope and final plan for implementation. While plans and costs may change along the way, this initial understanding of costs will help the implementation proceed as smoothly as possible.

When looking at implementing their course markings initiative, Mt. Hood Community College and four other schools, under the guidance of Open Oregon staff, decided that they did not have the ability to make the change in-house and would need to contract out the customization to the vendor, Jenzebar. Jenzebar offered to make the enhancements for all five schools for \$15,000. The group was able to split costs proportionally according to FTE, making a potentially prohibitive cost for any one school manageable for all. Reviewing both direct and indirect costs allowed the group to develop a path that allowed them to invest the amount they could afford and still produce a satisfying result for all five schools.

When preparing for implementation, consider:

#### Direct Costs:

- If changes to SIS need to be contracted out:
  - How much will it cost?
  - One-time change or is ongoing maintenance required?
- If additional staffing is required,
  - Where will the funding come from?
  - Short-term or long-term positions?

#### Labor Costs:

- If changes to the SIS need to be contracted out:
  - Who will manage the project, including coordinating with and overseeing the third-party making changes?
  - Does it involve any additional labor or adjustments on the part of the institution?
- If doing in-house edits to SIS:
  - Who will make the changes?
  - How much time/effort will this take?
- Do current staff have the time and/or resources to take on additional responsibilities required by new processes?
- If additional staffing is required:
  - Will this be the sole responsibility of the new position?

- Full or part time?
- How will the new person fit into existing workflow and office organization?
  - Will the management of the new person have a large impact on others?
- How much will it cost?
  - Where are the funds coming from?

## **EXTRA-INSTITUTIONAL PARTNERSHIPS AND GUIDANCE**

While all institutions will have unique circumstances, it does not mean that each must carry out course marking implementations on their own. Many institutions are beginning or have finished the process. This community can be drawn on for partnerships or guidance.

Although some higher education consortia or systems may ask each member institution to individually carry out implementation, some offer assistance in this process. For example, State University of New York offered funding to its institutions as part of a more general OER initiative. Its participating members can act as resources for others within the system who have not yet begun marking open and affordable resource use.

Last, even if the possibility of partnerships seems out of reach, the higher education community can still be drawn on for guidance. Marking open and affordable resource use is a

relatively new trend, so implementation strategies are still relatively fresh for those who have gone through the process. Many of these institutions are happy to share their path to implementation, so that each new school does not have to reinvent the wheel.

One valuable resource is a spreadsheet created by Nicole Finkbeiner (2019; formerly of OpenStax) that tracks institutions that have implemented course markings. Schools have an option to indicate if they are “[w]illing to share coding and resources to help another school set-up theirs,” with accompanying contact information. These volunteers are a resource, especially for those systems not covered in this book. Once course markings are implemented, institutions are encouraged to submit information about the marking to be included in the survey (Finkbeiner n.d.).





## CHAPTER 8.

### PROCESSES

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Marking open and affordable content will impact the technological infrastructure of an institution's **schedule of classes**, and it will likely cause disruption in current course materials reporting and schedule creation processes. This chapter will provide further exploration into the processes surrounding course materials reporting and course schedule creation, including who is involved and how the processes work. It then outlines potential pathways to incorporate open and affordable **course markings** into institutional processes, and it concludes by reviewing potential problem points.

### UNDERSTANDING INSTITUTIONAL PROCESSES

To understand how marking open and affordable resource use will impact current course materials reporting and course schedule processes, information must be gathered about how these processes currently function at the institution. This exploration should be included as a part of the environmental scan, as introduced in Chapter 7 (Preparing for Implementation). Such processes can be extremely complicated owing to the large number of stakeholders and the variety of workflows both across and within institutions.

## WHO IS INVOLVED

Stakeholders will vary from institution to institution, but typically three primary entities are involved: instructors, schedule (usually student services or registrar), and the campus store. While these three groups may not communicate often, each has a key role to play in course materials reporting and schedule generation. Though campus information technology (IT) is a key stakeholder in new process development, this chapter focuses on the decision making and reporting structures rather than on technological implications. IT is explored in more detail in Chapter 5 (Other Stakeholders).

### **Instructors**

Instructors have a hand in both the course schedule and course reporting. Many instructors have input on which classes they teach and which course materials they use, although some instructors, such as adjuncts or graduate students, may have less agency in these selections. The 2016/17 National Association of College Stores Faculty Watch (2017) reports that 80% of faculty select their course materials, although a Choice white paper on Course Material Adoption (Bell 2018) found a more conservative 54% with individual control over their course materials. The next most common option, with about 33% on the Choice survey, is an instructional committee or department chair. Steven Bell posits that such findings may be the result of a community college dominant response group, where the practice of selection by committee is more common. Other reasons for the lack of instructor input could include classes with multiple sections or multi-semester course paths that use the same textbook (Bell 2018).

### **Campus Store**

The campus store functions as the central location for an institution's students to identify and buy course materials. The

store collects course materials information from instructors and makes it available to students, often curating an online platform that shows class, professor, and required and recommended course materials information. Although students can use this information to purchase materials from whichever vendor they choose, campus stores must make available all required materials; that is, they cannot pick and choose which materials they carry based on considerations such as profitability (Kim 2014). Whether independently owned and contracted or run by the institution, campus stores are viewed as part of the institution and are thus subject to a state's textbook affordability and transparency laws, including those governing open and affordable resource use (Kim 2014).

### Schedule

The schedule provides information on an institution's course offerings to students. At its most basic, a course schedule will include course number and name, sections, time offered, and instructor. In the registration system, the schedule of classes also includes the seats available in the class and the wait-list. Both the schedule and the registration system will often include more detailed information, including class descriptions, fee information, and textbook information. Both typically are available digitally, while the course schedule may also be available as a PDF or print version. The schedule is often maintained by the institution's registrar or student services office.

### Information Technology

An institution's IT department is key to course materials reporting and course schedule processes. IT staff maintain and often create the infrastructure that supports the exchange of information between instructors, the campus store, and the schedule. Such infrastructure includes the **student information system (SIS)**, which is central for registration and student

information and will be discussed in-depth in Chapter 9 (Student Information Systems). IT should be consulted as new processes are developed to help ensure that any new technology infrastructure meets the needs of all parties, including the institution; is a feasible purchase, installation, or customization; and can be maintained beyond implementation. Though IT is not discussed further in this chapter, the role of both IT platforms and staff should be considered and IT included in discussions about implementation.

## UNDERSTANDING EXISTING PROCESSES

Instructors, the campus store, and the schedule each hold or organize one piece of the materials and schedule puzzle. Thus, it is important to understand how they work together to efficiently convey accurate information to students.

Instructors know which classes they teach and the course materials they assign. This information must be conveyed to both the schedule and campus store, who may either receive the information separately or share the information between themselves. This basic relationship is illustrated in figure 8.1.

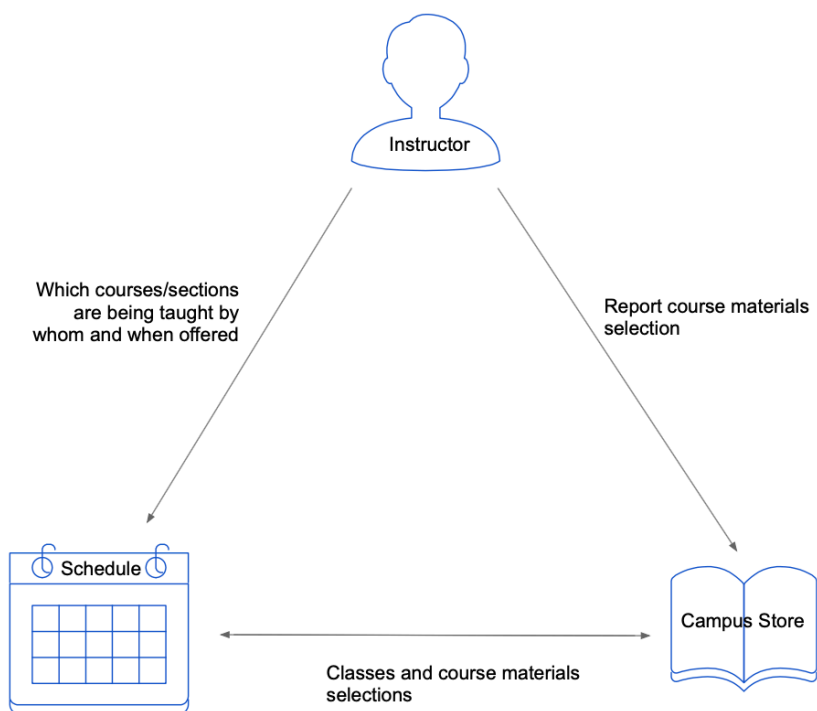


Figure 8.1: The interaction between educators and their department, the campus store, and the scheduling office for course materials reporting and course schedule generation. (adapted from Open Oregon)

The process for how these three entities share course materials information varies by institution. At some schools, instructors directly report their course materials to the campus store. Some may have an online system, for example, Barnes and Noble College's Faculty Enlight, whereas others may use a form. At other institutions, this process may be mediated on the department level by an administrator or department chair.

Similarly, the selection of courses may be reported directly by the instructor to the registrar, who puts together the schedule. More likely, a department representative (e.g., administrator, chair, or faculty member) works with instructors to determine a semester's schedule and then passes this information to the

registrar. Such reporting could occur directly within the SIS or through an external reporting process, like a form.

If the institution uses a separate scheduling software, the registrar will have to use the information collected to create both the course schedule and the registration system using the SIS. The two systems likely communicate—yet another technical process that should be taken into consideration.

Typically, the registrar sends the information on courses being offered to the campus store, which can then coordinate with instructors reporting on course materials for the sections they are teaching. For some institutions, this course materials information stays with the campus store, which has its own platform to allow students to search for and locate materials for a specific course. For other institutions, textbook selections are shared back to the SIS or course schedule, either as detailed information or as a link to the campus store's platform. In institutions with the latter, the campus store will need to send the course materials information to the SIS or schedule. The exchange of scheduling and course materials information may involve automated technical processes or may be a manual process, requiring human intervention to generate and send reports. Such reports would in turn need to be processed by the campus store and registrar.

The reporting of course materials and the course schedule, at some institutions, are the same process. If this is the case, the reporting and communication between the three branches will further differ. Figure 8.2 illustrates these complicated processes, providing key questions to help understand particulars at a specific institution.

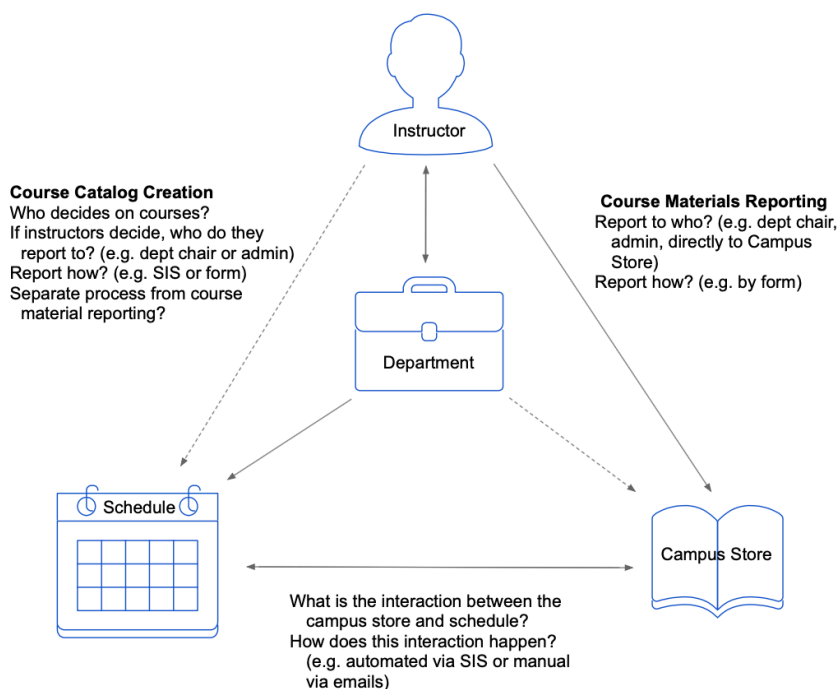


Figure 8.2: Course materials reporting and course schedule generation processes with instructors and their department, the campus store, and the scheduling office. Includes key questions that should be explored to help understand the processes at a specific institution. Dotted lines indicate alternate lines of reporting. (adapted from Open Oregon)

## CONSIDERING THE IMPACT OF COURSE MARKINGS ON EXISTING PROCESSES

While reporting open and affordable resource use certainly relates to the preexisting processes of course materials reporting and course schedule generation, that does not mean it will be easy to add an extra step. Although these processes don't have the strict rules underlying SIS database functionality as discussed in Chapter 9 (Student Information Systems), they similarly have limited ability for customization and change. Thus, the integration of reporting open and affordable resource use into existing processes should be carefully planned. Ideally, the new process for marking open and affordable resource use should be

as intuitive and streamlined as possible. Considering how the processes will be impacted before beginning customization will help to ease implementation.

In developing new processes, first consider how each of the three key players will be impacted by the new course markings. First, how will course markings be designated in the schedule: where and how will they be marked? Is space available to add an explanation? Such discussions will occur mostly in light of SIS customization. However, SIS customization is closely tied to process revisions and should be considered together:

- If customization is added to an already frequented part of the SIS, fewer changes to current workflows will be made than if the customization requires an entirely new data entry location.
- If SIS customization requires the entry of additional information at two different points, checking both of those places will need to be integrated into the process.
- Deciding who will be responsible for inputting the new information may depend on whether the task requires specialized knowledge or can be conducted by whomever ordinarily enters course materials or scheduling information.

Such considerations will lay the groundwork for revised processes.

Unlike the schedule, there is no guarantee that the campus store will be intimately involved with marking open and affordable resource use. Will they also display the course markings? Will they link out to open content, possibly in conjunction with the markings? Or will they collect the information to send to the schedule? City University of New York worked with their online store, Akademos, to provide instructors the option for “Course uses Open/Zero cost course,” which sends information to the



SIS when selected. A last option is for the campus store not to be involved with the reporting of open and affordable resource use at all. Since these resources are available without charge, instructors may not be required to report such usage to the campus store and, thus, the campus store may not be aware of the existence of such classes. Omitting the campus store from the process can have a negative impact on students, as doing so impedes the campus store's ability to make print copies of OER available for purchase by students who prefer this format.

The last of the three discussed entities, instructors, are intimately involved with the selection of these open and affordable resources for use in their classes. Instructors do not have to make additional accommodations for the course markings outside of awareness of the new requirement, although they will likely have to revise their processes to allow the campus store and schedule to accommodate these new designations.

Once it is determined how the schedule and campus store will integrate course markings, an institution can begin to look at existing processes to see how they can accommodate the new markings. The big question is how the newly required information will be communicated among instructors, the schedule, and the campus store. Will there be new forms? Additional staff? Or can existing processes accommodate checking an extra box along the way?

Additionally, understanding the communication between the campus store and the schedule is key to the process. If the campus store can automatically, or even manually, send the required information to the SIS, then the process might be easily accomplished. However, if the campus store cannot directly send course materials information to the schedule, as Portland Community College found, an alternate process of reporting this information needs to be identified (Klaudinyi et al. 2018). These latter cases may integrate marking open and affordable resource

use into the course schedule creation rather than course materials reporting process.

Figure 8.3 expands on the analysis of processes described in figure 8.2 to include key questions that should be considered when beginning to develop new processes that can encompass course markings. In the web version of this text, Figure 8.3 is represented in table form as Appendix C (Processes Table).

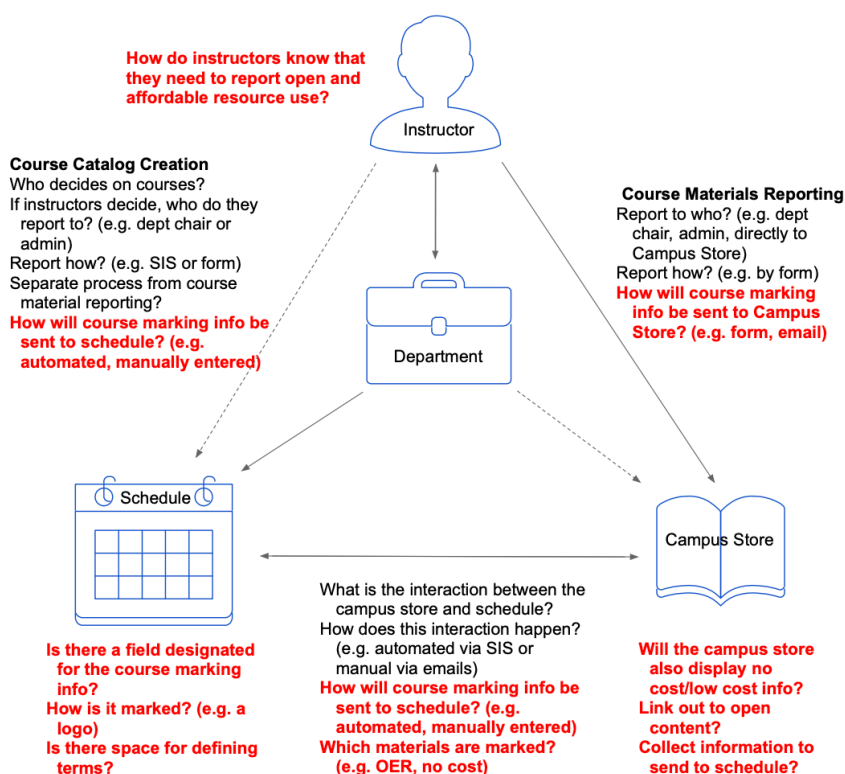


Figure 8.3: Course materials reporting and course schedule generation processes with educators and their department, the campus store, and the scheduling office. Includes key questions that should be explored to help create new processes for marking open and affordable content use (in red and bold). Dotted lines indicate alternative lines of reporting. (adapted from Open Oregon)

## DEVELOPING PROCESSES TO INCORPORATE COURSE MARKINGS

The processes developed for open and affordable resource implementation vary from institution to institution; however, there are some common pathways. This section splits the development of new processes into two categories: building on existing processes and creating new ones.

### USING EXISTING INFRASTRUCTURE AND PROCESSES

In many cases, existing infrastructure and processes are able to accommodate the changes required for the implementation of open and affordable resource use reporting. When this occurs, the new processes build on existing processes, tweaking when small changes are needed.

In some cases, indicating open and affordable resource use is simply the additional entering of information in one or two places, such as at Houston Community College. These new data entry points, such as the addition of a new attribute, are often a part of the SIS and thus the course schedule creation process. Thus, the responsibility falls to those who typically handle the interactions with the SIS, often department chairs or administrators. Instructors communicate whether the designation applies to their course, and the administrator then indicates this detail in the SIS. Some small additional effort is required, but it fits nicely into existing processes.

When the information is required to be reported in two places, for example, in the case of City University of New York's separate reporting of textbook and **Zero Textbook Cost (ZTC)** status, the changes might be a tad more complicated. Instructors can still indicate resource use while working within existing processes, but they have to add additional steps to ensure that the new requirements are met. City University of New York experienced pushback from instructors for this addition to their

workload and ultimately decided to change processes so that the central registrar's office entered the code for ZTC courses.

These are clear examples of integrating reporting open and affordable resources use into the schedule of classes, but what about the traditional course materials reporting structure through the campus store? The store is typically not part of the reporting process, owing to a technical inability to transmit the information from the campus store to the schedule or SIS, as was discovered by Portland Community College when they attempted such a solution. While such a solution would have resulted in the smoothest process, they were unable to automate the communication between the campus store and their Banner SIS (Klaudinyi et al. 2018).

There are some cases, however, where this communication is possible. City University of New York was ultimately able to work with their online campus store, Akademos, to customize their system so instructors have the option to report that the course is a zero-cost course. This report then automatically syncs with their registration system, triggering the attribute. Such automation, where possible, may be the least invasive process change for all parties involved.

Nicolet College was also able to involve their campus store, although not through automated reporting. Nicolet's manager of open and instructional resources (formerly known as the campus store manager) was already receiving course materials requests. A new step was introduced at this point in the workflow, in which course materials requests are manually reviewed to see if they met the no- or low-cost course criteria. This information is communicated directly with the registrar's office, who applies the designation to the tagged courses. While this involves extra work by the manager of open and instructional resources, it replicates existing communications between the campus store

and the schedule and allows instructors and departments to continue with the established process.

## CREATING NEW PROCESSES

Sometimes the existing processes do not have enough flexibility to allow the addition of open and affordable resource use reporting. Customization of the SIS may be specialized, with new fields being inconvenient or impossible to create or modify. Adding a category to the textbook reporting form may be prohibited for one reason or another. In these cases, new processes may arise.

Such a new process will be specific to the institution and the needs it aims to fill. Mt. Hood Community College opted for the route of new process creation. Realizing that instructors were best positioned to report quickly and accurately on their own course materials selection, instructors—rather than administrators—were asked to indicate no- or low-cost courses when reporting other course information. They created a form to report open and affordable resource use which would directly map to the corresponding inputs in their SIS, which instructors would complete for each section each semester. Although the form was created with input from instructors, filling out the form still added a step to the previous course materials reporting process; as a result, initial usage of the form turned out to be low.

Alternatively, new processes may arise because they are the easier solution for integration of the new markings into existing processes. At Lower Columbia College, the same person as before assembles the initial schedule, before sending it to the college's OER librarian, who manually tags classes as **Alternative Educational Resources**. The list of these courses is in turn sent to instructors to review for accuracy. The approved list is sent back to the initiating staff member, who then manually inputs the sections into the schedule. The involvement of the OER

librarian and approval by educators introduces new steps to the workflow; however, Lower Columbia College is a small institution. Such a hands-on solution may not be feasible for larger institutions but was found to be a relatively efficient solution given the campus's needs, infrastructure, and workforce.

A much larger institution, Kwantlen Polytechnic University, was able to accomplish something similar, though doing so required additional resources. In the new process, professors are emailed to confirm inclusion in the campus Zed Cred program and student assistants are paid to review the responses and corresponding spreadsheets. Process designers also took advantage of the traditional schedule creation processes, sending the completed spreadsheets to the departmental chair or administrator to report this information to the registrar, who then codes it.

Kansas State University also implemented a mediated reporting method for open and affordable resource use. Instead of requiring instructors to report their open and affordable resource use, Open/Alternative Textbook Initiative leaders created a list of instructors who had completed initiative projects and/or been awarded initiative grants. This list forms the basis for open and affordable course marking. Instructors not involved in the grant program but using open or alternative educational resources can apply to be added to this list. Initiative leaders review these submissions to ensure that the appropriate classes are marked in the schedule of classes. Developing this new process enabled the school to easily add open and affordable course markings while working within the existing system.

## VETTING AND FEEDBACK MECHANISMS

Whether new or existing systems are used for course marking, it is essential to build in opportunities for students and instructors

to share feedback with stakeholders who can act on this information to improve policies, processes, and course data. Robust feedback mechanisms are particularly important in situations where marking is automated. Larger programs, institutions, and systems may face sustainability challenges if vetting all courses prior to marking them as open or affordable in the schedule of classes, though unmediated tagging can introduce inconsistency and inaccuracy in the marking process. Anecdotal evidence suggests syllabi vocabulary can be manipulated to skew course marking data and may result in providing false or misleading information to students. For example, instructors may adopt the term “recommended” rather than “required,” despite heavy use of a high-cost course resource, in order to justify a free or low-cost designation. Syllabi evaluations of courses submitted for free/open markings have also revealed the use of illegal copies of commercial materials that can be freely accessed and downloaded from unauthorized websites. Developing and prominently displaying a feedback loop for students impacted by such errors in the marking process is essential in ensuring inaccuracies can be removed from the schedule in a timely manner and corrective action taken as necessary.

Processes should clearly identify how feedback on course markings will be addressed, as well as the timeline and parties responsible for monitoring and responding to reports of inaccuracies in the data. Some institutions implement spot-checking or sampling procedures to lower the risk of miscommunication with students. See the State University of New York, Lower Columbia College, and City University of New York case studies for examples.

## **POTENTIAL PROBLEM POINTS**

Even with careful planning for the addition of open and affordable course markings, problems may arise during

implementation. Problems in the existing system, such as the timely reporting of course materials, should be taken into consideration when planning for implementation even if there is no fail-safe way to plan against them. Predictable problems, such as misreporting, can be combated with education about open and **affordable educational resources**.

## VARIETY AMONG PROCESSES

Course materials and schedule reporting processes vary among institutions but can even differ among departments on one campus. Jen Klaudinyi and colleagues, in their Open Oregon webinar (2018) cite this as a major hurdle to implementing course markings at Portland Community College. Although they originally intended to use the current communication processes, they found instead that the lines of communication and processes were not standardized across departments. Although Portland Community College was able to implement course markings without resolving the communications issue, a streamlined, instructor-generated reporting process was placed on a wish list for future iterations. Taking the variety of processes into account and accommodating them may be imperative to getting an initiative off the ground, but finding a simple option that allows for slight variations might be the best path forward.

## WORKLOAD OVERLOAD

No matter how much planning an institution undertakes, there is a possibility that not all will go smoothly post-implementation. The adjustment to existing processes might be more involved and time intensive than originally thought, and organizers might encounter pushback. City University of New York fielded reports of unease at additional workloads and frustration with the process as designed. Likewise, unexpected hurdles may appear. At Kansas State University, Open/Alternative Textbook



Initiative leaders initially planned to code the course themselves but ran into difficulties emerging from the more frequently than anticipated updates to processes and systems. It is important to be flexible in these new processes. Kansas State University asked their implementation partners, who included those overseeing the SIS, to take over the coding process because of their familiarity with the system. City University of New York responded by restructuring their processes so that a list of ZTC courses could be sent for coding to the central registrar's office, which hired an additional part-time staff member to handle the additional workload. Thus, while planning is key to laying a good foundation, the flexibility to revisit those plans to ensure they best fit the institution will help with smooth implementation in the long term.

## TOO MANY HANDS IN THE POT

Spreading responsibilities is one way to combat work overload; however, the more people there are involved in the process, the more room there is for error. The possibility for accidentally unchecking a box or deleting a name from a list may arise if the database or list must pass through many hands for approval. A streamlined process presents less room for error, but it may not be clear at the outset what the streamlined process will entail. Adjustments may be necessary to find the balance between new tasks, workload balance, and accuracy.

## TIMELY REPORTING OF COURSE MATERIALS

Although the **Higher Education Opportunity Act** (U.S. Department of Education 2008) mandates the reporting of course materials by registration, in practice this timeline isn't always met (Klaudinyi et al. 2018). Campus store managers, when discussing reporting course material adoption, will likely raise this as a problem area; acknowledging the deadline is one thing, but making instructors aware of this legal imperative and their

meeting it is problematic for a number of reasons. A certain amount of flexibility may need to be built into the process to account for the probable inability of the campus store to generate reliable information.

Houston Community College elaborates on this problem in their case study. Some educators do not comply with the requirement, but not always because they mean to. Classes are sometimes not assigned to instructors before registration opens, for example. In these situations, the instructor cannot select the materials ahead of the deadline, let alone report them.

If existing course material reporting guidelines are not universally met, there is a slim possibility that new guidelines for reporting open and affordable content will be. However, implementing the infrastructure and processes lays the groundwork for compliance, and educating about guidelines should raise numbers of those who meet requirements.

## COURSE CHANGES

Course markings can be further complicated when course material selections change between the time of registration and the beginning of the semester. Some instructors receive delayed assignments, preventing them from reporting their materials selections. Others may be assigned classes and report their materials selections prior to registration only to have that assignment change before classes begin. When the instructor for a section changes, the course materials may change as well.

Such changes have a significant impact on course markings. Depending on the process for indicating which classes use open and affordable course materials, updating the schedule of classes may be easy or extremely difficult. For institutions using stand-alone lists, the list must be updated or else the outdated information will continue to be communicated to students. Even for those processes that allow for easy updating, the institution

must find a way to ensure changes are communicated to students. A student who selects a section based on the cost of course resources will surely be taken aback if higher textbook costs are revealed on the first day of class. Institutions should not expect students to check the SIS regularly for updates prior to the beginning of the term. Developing a process for updating the SIS post-registration and communicating any changes are essential for combating these challenges.

## MISREPORTING

One of the biggest issues with tracking open and affordable course material use is the lack of a clear understanding of what falls under this category. For example, if an institution uses an OER marking, instructors may not know what “open” means and report a resource that is free but not open. Others may select a box without meeting the requirements, as was often encountered by City University of New York through their Akademos reporting option.

Some schools have reduced the possibility of misreporting by eliminating educator involvement. For example, Kansas State University issues an icon in the schedule of classes only for those that have completed their grant program. Others can apply to the Open/Affordable Textbook Initiative leaders, who approve these applications before compiling a full list of eligible classes to be sent to the registrar.

The most common way to combat such misreporting is through education. Many schools have compiled guidance outlining what should be marked, such as City University of New York’s “Guidelines for Designating a Course Section with the ‘Zero Textbook Cost’ (ZTC/OER Attribute” (CUNY n.d.). Such documentation can provide a clear overview of what should be marked, as well as the process for doing so, helping to eliminate

errors along the way. Implementing robust feedback loops, as discussed above, is another strategy for combating misreporting.

## MIXED MESSAGING AND STUDENT CONFUSION

Sometimes, how open and affordable resource use is marked at the campus store can be problematic. This can be especially prevalent for those that report course materials to the campus store separately from marking open and affordable course use. Instructors are typically supposed to report course materials selection to the campus store, but when materials do not have an associated cost, instructors may skip reporting their course materials information. Either instructors may not be aware of the correct avenue to share such information or the campus store might not have a system in place for reporting it. When resource information for a class is not reported to the campus store, the store may report to students that no materials are required. For example, at Central Virginia Community College, the campus store tells students “No Books Required for this Course” when no book is reported. Such messaging leads students to assume that no materials are required for the course, so finding out that they do indeed need materials, though ones that are freely available online, may come as a surprise. At Central Virginia Community College, students complained to administration about this mixed messaging. In 2020, the college adjusted its strategy to adopt common and consistent language that aligns with best practices adopted at the system level.

There may also be confusion at the campus store over whether a book should be marked as required or as recommended/optional. Regardless of whether they report the free online counterpart to the store, some instructors report the print version for those students who would like to read in print and/or use financial aid. If a book is marked as recommended or optional, the option to purchase exists while leaving an opportunity for instructors to share about the free online

version. However, if print versions are marked as required, especially without corresponding indication that a free version is available online, students can be misled that they have to purchase a book when no requirement actually exists. Further, inclusion of print versions as required can, in some cases, move a class beyond an institution's low-cost threshold and thus make it no longer eligible for the designation, as some Connecticut institutions discovered (Chae et al. 2019).

Lower Columbia College encountered a different type of student confusion in their efforts to make students aware of open and affordable resource use in classes. They generated a static list of a given semester's OER classes to assist in marketing OER and their use in certain classes, but they found that some advisers assumed that *all* sections of a course listed on the document used OER. Students were being told that some sections had adopted OER when they hadn't. The misunderstanding was addressed with advisers, but the necessity for frequent updates makes keeping students and advisers informed an ongoing process.

Clear marketing and education combined with common and consistent language can go a long way toward ensuring that the newly reported course markings are correctly understood by those they were created to benefit: students.



## CHAPTER 9.

### STUDENT INFORMATION SYSTEMS

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This chapter provides a closer look at **student information systems (SIS)**. Since most institutions will implement **course markings** by customizing their SIS, understanding SIS capabilities and limitations is paramount.

Many institutions use third-party SIS. These systems have developed a wide array of preset capabilities and functions, but can be limited in terms of customizations due to the system environment at different organizations. Banner, Powercampus, Jenzabar, and Peoplesoft are popular suppliers, and they will be discussed in detail at the end of this chapter.

Some institutions have chosen to develop their SIS in-house. Although these systems typically have similar functionality to third-party systems, they require a heavy investment of time, money, and personnel to develop and maintain. However, such in-house systems are also created with specific institutions' needs in mind. While not exportable to other institutions, such customization can be a benefit to institutions with specialized needs.

Due to the potential specificity of in-house systems, which may not be generalizable, this chapter focuses on the properties of

commonly used third-party systems. However, similar principles can be applied to in-house systems.

## **FUNCTIONS**

Institutions depend on an SIS to provide a central location for information on student attendance and grades as well as tools for general administration and reporting. The central features that an SIS offers are as follows (G2 2019):

- Information management
- Reporting
- Individual education plan creation
- Admissions management
- Billing and payment
- Student information management
- Student portal so that students can track their own progress
- Parent portals for K-12 applications
- Registration and scheduling
- Gradebook and transcripts

Putting all this information into a central system maintained on campus or in a cloud-based service has a number of benefits, including facilitating communication between students and instructors, facilitating interdepartmental communication, increasing security for student records, providing a “one stop shop” for students to manage their education, and providing a single place for the institution to get reports about student progress or other information that can be used for planning or evaluation (G2 2019).

Third-party SIS providers have developed a wide array of preset



functions that are often complex. For example, Banner includes a mechanism for students to search for classes and view class details, campus store links, course descriptions, syllabi, class attributes, restrictions, instructor/meeting times, enrollment/wait-lists, co-requisites, prerequisites, mutual exclusion, cross-listed courses, linked sections, and fees. Many colleges take advantage of these capabilities, using their SIS to both monitor student information and display the schedule of classes.

An SIS may also work well with other systems such as university scheduling software or systems developed in house. These systems complement the features of the SIS, providing a more comprehensive set of administrative tools or focusing specifically on generating dynamic course schedules (*Acalog Catalog Management* 2020). Compatibility with other institution software systems allows an SIS to grow beyond its innate data collection and management capabilities to provide a more integrated and interactive experience for campuses.

## **CUSTOMIZING THE SIS**

The success of any technical customization depends heavily on clear communication about requirements and expectations. As early as possible, for any system, a planning team should be formed that includes representatives from all groups on campus that have a stake in the outcome (e.g., information technology [IT], website groups, campus store, registrar or records office, faculty representatives, student representatives). Part VII (Case Studies) offers examples that demonstrate how addressing technical issues is often less difficult than undertaking the planning work needed to make them possible. Thus, sage advice from the case studies is to start simple and build in more complex functionality later, implementing a viable product instead of getting hung up on perfecting an ideal. Often, neither local IT nor vendor IT support has much control over the complexity of changes requested and sometimes has the difficult task of

telling people their requests are not possible given the timeline or resources available.

When beginning to plan a customization, stakeholders should discuss their needs and requirements with the staff or vendor who runs the SIS so that their options are known and understood. Identifying the goal of the change and then consulting with whoever maintains the SIS is the best way to implement that goal in a reasonable amount of time and with a reasonable amount of effort. Such change may be feasible using central IT developers who maintain the SIS on a day-to-day basis. Feasibility can depend not only on the ability of developers to change the underlying database, but also on their availability to make the change and maintain that change in the future. Other changes may require returning to the vendor for assistance with updates, but these will likely come with an associated cost. For example, Mt. Hood Community College, along with four other Oregon schools, were able to work with Jenzabar to obtain a software enhancement that would allow for course marking, splitting the cost along FTE. Determining a cost-benefit analysis as to whether to make customizations internally or through an outside vendor should be a part of the environmental scan.

When considering local customization, it is also important to remember that starting from scratch may not be necessary. Many SIS providers have a large consumer base of higher education institutions, and with these come a range of preexisting customization options and communities of users to help with changes. For example, even though Banner is a proprietary software, it is such a heavily used system that Ellucian makes Banner's source code available to their customers (Ellucian 2020). Accessing this code directly can aid greatly in any customization plan. Further, because their customer base is so varied, some common customizations can actually be built into Banner. Good communication with the vendor about needs and future desires is key. Many organizations have a designated

person within their IT department to communicate with vendors about technical problems and requests, so identifying that person—and communicating course marking needs clearly—should help the process.

Despite these provisions, there are still some cases where an organization cannot dedicate the resources—whether time, money, or effort—needed to make a change. In these cases, institutions should consider low-tech solutions, like stand-alone lists of low-cost classes that can be presented to the students outside of the schedule of classes. Still, this strategy can present several challenges, including making sure students are aware of the existence of the list and will see it before registration. Even if an SIS is customized, a separate list of classes with **open educational resources (OER)** or other designations can serve as a useful reference document, whether exported from the SIS or collected independently. Lower Columbia College continues to use such a list alongside their course markings to help advisers guide students to OER classes and promote OER on campus.

## LIMITATIONS ON CUSTOMIZATION

The systems themselves are fairly versatile, yet users requesting customizations will likely experience resistance to change. In this section, the possible limitations will be listed out for the system environment at different organizations.

## OVERALL OPERATING BUDGET

Organizations with a proprietary SIS can have vastly different experiences on limitations. Organizations with more money will have more resources to put toward customizations, and will usually have more influence over the vendors involved. Two organizations can have the same system but, based on their overall level of funds or influence, have very different experiences, especially when it comes to new customizations.

## SERVICE-LEVEL AGREEMENTS

As an organization searches for an SIS, it engages in negotiations with the vendors. This negotiation includes what systems the SIS has to integrate with, how much training and customization will happen, and a whole host of other agreements outlining who will do what. These details are decided and in writing before the system is implemented. These service-level agreements are not public facing documents. If an organization has lots of local resources, they may negotiate for more access to the source code or background database of the system. Or an organization can negotiate for more ongoing support and customizations. The service-level agreement may stipulate how many hours of work the vendor can give to further customizations, or it may set a price for changes beyond what is stipulated. The important thing to remember is that unless an organization is in the middle of transition from one system to another, they will already have signed this agreement and be working within its limitations. The local IT staff, or vendor contact that people will work with to get course markings done, will have little control over what has already been agreed to and will be constrained in ways that may not be obvious.

## THE COMPLEXITY OF THE CUSTOMIZATION

Regardless of the system or the agreement, simpler customizations will have a greater chance at success than more complex requests. An institution's SIS is a large software package written in code, which should be infinitely customizable. In theory, no change is outside the realm of possibility if it's logically consistent. However, not all customizations are equal. Some customizations requests could be easy updates by people at an organization adding a value to a list, others could be simple database updates, while others would require full software rewrites to implement. Companies and local IT may reject customizations based on an assessment of the return on

investment of the time and the level of complexity for the customization.

With any locally created customizations of vendor supported systems, there are a few issues to consider (Davis 2018). If upgrades happen with any regularity, then customizations may have to be redone. It is also possible for upgrades to render a customization as implemented difficult to re-implement, and a new solution has to be reworked. Creating custom code can also lock down aspects of a system, which may make future changes difficult. The more aspects of the system a change touches, the higher the chance that this will be a problem. Finally, local customizations can shift the burden of maintenance off of a vendor and onto local IT staff, which could be a lasting problem. If the campus IT staff balk at a change, then it's probably because their cost-benefit analysis indicates that the requested customization and subsequent maintenance would be inappropriate to include in their current workflow and resource limitations. Listen to their professional input, and ask if there is a different way to reach the goal that would be more reasonable.

## LOCAL IT RESOURCES

In general, the more high-level local IT an organization has, the more they will customize in house, even with priority software. Institutions without high-level local IT will rely more on the company for customizations. The quality of local customizations is highly dependent on the skill of the people involved, and there might be a learning curve for working with a new system. An organization customizing using local resources should allocate plenty of time for local IT to orient themselves to the codebase. They are working under extreme scrutiny and may be very cautious. Vendors will often provide a test system so that changes can be trialed, but this is not always the case.

## CUSTOMIZING THE SIS FOR OPEN AND AFFORDABLE

## RESOURCE USE MARKING

Many institutions, including those explored in this book's case studies, have customized their SIS to indicate open and affordable resource use in their schedule of classes. The most common path appears to be designating these courses as an "attribute" in the SIS, an implementation followed by CUNY, Houston Community College, Kansas State University, Kwantlen Polytechnic University, and several SUNY institutions. As CUNY says in their case study, attributes are already a common way to indicate specific features of a course—for example, "Writing Intensive"—and as such are already within the scope of an institution's usage of the SIS. Some coding may be required to implement these new attributes, as Tompkins Cortland Community College describes, and further customizations may be needed to allow for a specific display of the information, such as with Kansas's icon. However, as Kwantlen Polytechnic University found out, the process is not necessarily that difficult. In fact, the ease with which they were able to implement the ZTC, or **zero textbook cost**, attribute inspired them to create additional new course attributes.

Institutions not using attributes have identified other places in the schedule where it is easy to add a new piece of information. Lower Columbia College was able to identify an unused tag in the system and reappropriate it. Portland Community College already had a customization in their system which had added a finance code. Since this section was already visited every semester by those entering course information, it made sense to add the new designation for open and affordable resource use there (fig. 9.1; Klaudinyi et al. 2018).

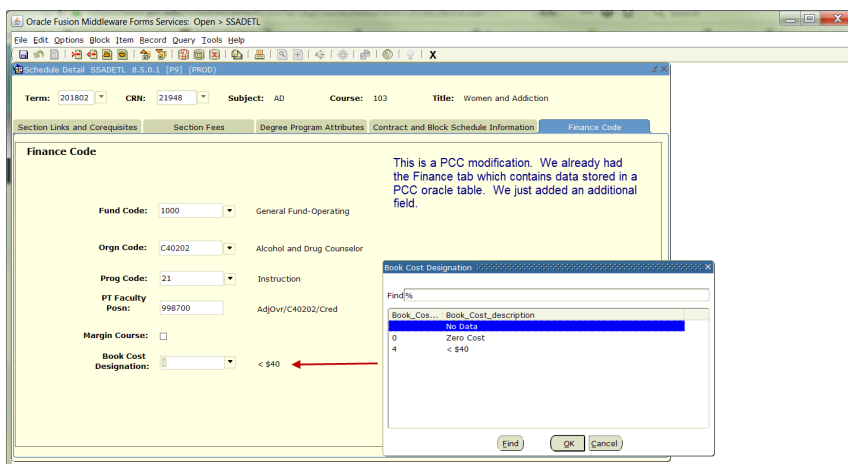


Figure 9.1: Form for reporting textbook costs for Portland Community College.

Of course, there is also the possibility that making a change might not be so easy. In the case of Mt. Hood Community College, the only option for customization was a software enhancement, which incurred a fee from their vendor, Jenzabar.

Indicating open and affordable resource use in the SIS is often further complicated when it must be reported in multiple ways. For example, SUNY has implemented a system-wide back-end reporting option in the SUNY Institutional and Research Information System. This tracks OER courses for data collection, such as success and retention rates. However, SUNY schools implementing a front-end marking to be visible to students for registration must do it using an entirely different process in a different platform. CUNY, on the other hand, requires its instructors to use the same system, but report textbook information in one area while another is marked to indicate that the course is ZTC. Similarly, Houston Community College reports open and affordable resource use within one system but requires tagging the course in both the Course Attribute fields (fig. 9.2) and the Course Material Type field (fig. 9.3) on the Textbook tab. The former allows students to search for classes with the attribute and tracks these courses for data purposes

while the latter allows the “Textbook Savings” note to display alongside a description of the class. Such complications demonstrate the importance of identifying the goal of course markings and how they are to appear before starting the implementation.

*Course Attribute	*Course Attribute Value	
010	010 Communication (I)	
LCB	Low Cost Book	

Figure 9.2: Fields for reporting course attributes at Houston Community College

**Course ID:** 002016 **Course Offering Nbr:** 5  
**Academic Institution:** Houston Community College  
**Term:** Spring 2017  
**Subject Area:** ENGL  
**Catalog Nbr:** 1301

**Class Sections**  
Session: SS **Class Section:** 0036 **Component:** Lecture **Class Nbr:** 14358  
Associated Class: 36 **Units:** 3.00 **Event ID:**

**Textbook Assignment**  
Textbook Assignment Status: ☐ Pending ☒ Textbook entry complete  
☐ No textbooks assigned to class **Copy Textbooks**

Seq No	*Course Material Type	*Course Material Status	Title	ISBN	Author
1	Low Cost Br				

**Special Instructions**  
The total cost for texts in this course will be \$40 or less. Internet access may be required. Other instructional materials may not be included.

Figure 9.3: Form for reporting course material type at Houston Community College

## PRODUCTS

This section provides an overview of common SISs and their customizability. Support tools offered by the vendor to enable course marking are described. Approaches to the student-facing appearance and navigability of course markings are explored, and how these various approaches might affect staff workload is addressed.



## BANNER BY ELLUCIAN

Quick Overview	Used by 1,400 organizations worldwide.
Unique Features	Support local development with code and training, but not always free
Vendor Support for Customization	This depends on the agreements between the vendor and the organization.
Additional Local Support for Customization	Provides access to source code and training for local IT on how to customize the system. The training is not always free.
Case Studies	Kwantlen Polytechnic University

Banner is used by 1,400 organizations worldwide (*Ellucian Banner* 2020). For all versions of Banner, Ellucian has a variety of tools, techniques, documents, and source code to customize the software for individual institutions. The software is easily customized for themes, and advanced administrators can add audit fields and deploy extensions. Organizations can also manage their extensions through Git (Ellucian 2020), and the company provides some tutorials on how to accomplish this. Hiding a field, changing the order of tabs, and changing the text of a label, are among the options available in the **self-service client**, or portal. The self-service client enables a non-IT person to make customizations in a system. While Banner is the only SIS on this list to make a point of mentioning their self-service client, many systems have similar options. Banner has been successfully used to implement course markings for OER. For example, Kwantlen Polytechnic University successfully implemented OER course markings utilizing Banner and found that adding a course attribute was an easy change. The attribute has made it easier to identify the impact of the course marking because reports can be generated using the OER attribute.

## POWERCAMPUS BY ELLUCIAN

Quick Overview	Used by 200 colleges and universities. Usually for smaller or mid-sized institutions.
Unique Features	Mobile and Web Services
Vendor Support for Customization	Because it is not as popular as Banner, there is not as much available in the way of support for customization locally.
Additional Local Support for Customization	Not as much available in the way of support for customization locally.
Case Studies	Tompkins Cortland Community College and Fulton-Montgomery Community College (SUNY) Nicolet College

PowerCampus is used by 200 colleges and universities and is designed for smaller institutions, as compared with Banner (*Ellucian PowerCampus* 2020). Nicolet College implemented their course marking in PowerCampus. In their implementation, the course markings show up as a course note below the section it was attached to on the course schedule. Their technical implementation was swift, taking only two weeks; however, students are not able to search and limit results by OER.

## JENZABAR

Quick Overview	Nearly as popular as Banner with 1,350 institutions using it.
Unique Features	Cloud services.
Vendor Support for Customization	The vendor does not provide as much online support for training local staff in how to customize the software.
Additional Local Support for Customization	Because of the lack of training from the company, local customization may have a higher learning curve.
Case Studies	Mt. Hood Community College

Jenzabar was founded in 1998 as an online community for professors, students, and administrators. In 2000, it started producing enterprise software solutions for higher education

(Jenzabar 2020). The company has two solutions, Jenzabar One (used by 1,300 institutions) and Jenzabar SONIS. Jenzabar SONIS is designed for smaller institutions. Jenzabar CX is the cloud-based version of the software. Mt. Hood Community College implemented OER course markings in Jenzabar CX. They had problems with trying to limit the text field to accept text and not code.

## PEOPLESOFT

Quick Overview	PeopleSoft Campus Solutions
Unique Features	Created from software that provides human resources and financial management software, so not originally an SIS.
Vendor Support for Customization	<a href="https://www.oracle.com/us/assets/057419.pdf">https://www.oracle.com/us/assets/057419.pdf</a>
Additional Local Support for Customization	Varies by organization.
Case Studies	CUNY (specialized as CUNYFirst) Kansas State University (with Acalog ACMS) Houston Community College

Peoplesoft Campus Solutions is a side product of Oracle’s PeopleSoft human resources software and therefore has a history of flexibility and integration. Oracle claims to be competitive with other SIS providers in their ability to integrate Campus Solutions with other software and to tailor it for each institution. Customization in an existing SIS, however, will have already been done, and support for local changes will depend on individual institutions’ agreements and resources.

The University of Texas at Arlington has implemented free and low-cost course markings in Peoplesoft as Course Attributes available in the “Additional Search Criteria” of the schedule of classes (fig. 9.4; Reed 2018).

▼ **Additional Search Criteria**

Meeting Start Time

Meeting End Time

Days of Week

☐ Mon ☐ Tues ☐ Wed ☐ Thurs ☐ Fri ☐ Sat ☐ Sun

Instructor Last Name

Class Nbr  ?

Course Keyword  ?

Minimum Units

Maximum Units

Course Component

Session

Mode of Instruction

Campus

Location

Course Attribute Educational Resources Cost

**Course Attribute Value**

Free Educational Resources

Low Cost Educational Resources

Figure 9.4: University of Texas at Arlington's search filter in schedule of classes

## OPENSIS

Quick Overview	Open source SIS with a vendor who will host the system.
Unique Features	Open source
Vendor Support for Customization	They have both a paid-for service and an a la carte service model, where individual support services may be purchased.
Additional Local Support for Customization	The system is open source, so all customization requires completely local support and is dependent on local expertise, unless a hosting service is employed.
Case Studies	n/a

OpenSIS was designed as an open source alternative to proprietary SISs and in some ways has comparable features. Even though the software is open source, most organizations pay to use the hosted option, which provides technical support and

troubleshooting. OpenSIS also offers openSIS-Surge, which is a cloud-based version. Because it is open source, customizations are possible but entirely dependent on local resources. The software is written in PHP and MySQL, which are common languages for developers. None of the case studies in this book use OpenSIS or any **open source software**, so there may be less of a community available to help those that decide to implement open source solutions.

## IN-HOUSE DEVELOPED SYSTEMS

Quick Overview	In-house developed systems will have been made locally with local needs.
Unique Features	Depends on the system. Heavy customization.
Vendor Support for Customization	Outside vendors can be hired to do customizations, but it takes extra effort and money to do this.
Additional Local Support for Customization	Most customizations will need to be done in house.
Case Studies	Central Virginia Community College Lower Columbia College

With all in-house developed systems, the options for customization are dependent on the organization and the resources available. Since a vendor is not involved, contracts are not a problem and upgrade concerns are not as much of a formal consideration. However, in-house developed systems are dependent on local IT resources, so if the system does not have good documentation or the people who designed it have left the institution, changes may take longer and be more of a resource burden.

Similarly, local institutions will require local maintenance and awareness of the back-end, which can make any future changes difficult, such as those required for adding a new course marking designation.



## CHAPTER 10.

### STAND-ALONE LISTS

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Due to the expense and potential complications of integrating **course markings** into the **student information system (SIS)**, some institutions elect to create a stand-alone list of all courses that adopt open or affordable resources. This chapter explores options and considerations for such lists.

#### LIST OPTIONS

Stand-alone lists provide information about courses that share a common feature, such as use of open or affordable resources, and are housed on a webpage outside the SIS or distributed as hard copies. A list can be an effective stop-gap solution, particularly for institutions facing a new state mandate with a short timeline for implementation, as was the case with schools subject to Texas Senate Bill 810, described in Section I (Policy). Others use stand-alone lists as their primary method of communicating this information to students. For example, Lower Columbia College creates a stand-alone list flyer (fig. 10.1) every quarter that informs students of affordable educational resource courses. The list is linked to Lower Columbia College's class schedule webpage to help students discover the information as they are searching for courses.

## Does Your Class Use Free Or Inexpensive Textbooks?

Does your class use FREE or INEXPENSIVE textbooks? Alternative Educational Resources (AER) are print or digital, free or inexpensive alternatives to commercial textbooks. AER include course materials that **cost our students less than \$30** to use, and include used textbooks and other physical and digital resources. Look for this symbol in your class schedule: ©

### COURSES USING AER — WINTER 2019

ANTH& 206 Cultural Anthropology-DIV-0995	CHEM& 100 Preparatory Chemistry-1770, 1775, 1780	ENGL& 102 Composition II-2800, 2805, 2820, 2825, 2835, 2840, 2850, 3012
ART 130 Introduction to Graphic Design-1055	CHEM& 110 Chemical Concepts w/lab-1780	ENGL 125 Arts Magazine Publication II-2685
ART 241 Beginning Ceramic Art-1080, 1085	CHEM& 121 Introduction to Chemistry-1790, 1795, 1800	ENGL 225 Arts Magazine Publication V-2690
ART 242 Intermediate Ceramic Art-1090, 1095	CMST& 220 Public Speaking-2155, 2175, 2180, 2185	ENVS 150 Environment & Society-DIV-2920
ART 243 Advanced Ceramic Art-1100, 1105	CMST 250 Intercultural Communication-DIV-2145	ERSI 105 Earth Systems-2935
BIOL 150 Human Genetics/Society-1180	CS 170 Programming Fundamentals-2300	HUM 251 Ethics/Policy Healthcare III-3590
BIOL& 160 General Biology w/lab-1255	DRMA& 101 Introduction to Theatre-2420	MATH& 107 Math in Society-4260, 4270
BIOL& 212 Majors Biology Animal-1265	DRMA 107 Introduction to Acting II-2385	MATH 240 Differential Equations-4225
BIOL& 241 Anatomy & Physiology I-1280, 1285	DRMA 116 Stage Crafts I-2390	MUSC 100 Fundamentals of Music-4415
BIOL& 242 Anatomy & Physiology 2-1315, 1320	DRMA 117 Stage Crafts II-2395	MUSC 115 Group Piano Instruction-4445
BIOL& 260 Microbiology-1350	DRMA 118 Stage Crafts III-2400	MUSC 145 Beginning Voice-4495
BTEC 149 Internet Fundamentals-1465	DRMA 207 Acting II-2410	NUTR& 101 Nutrition-4995
BTEC 150 Introduction to Google Apps-1475	ECON 105 Introduction to Economics-2525, 2530	PSYC& 100 General Psychology-5305, 5315, 5320
BTEC 155 Website Management-1480	ECON& 201 Micro Economics-2535	SOC& 101 Introduction to Sociology-DIV-5410, 5415, 5435
BTEC 165 Cultural Awareness for Care Professionals - 1505, 1510	ECON& 202 Macro Economics-2540	
BUS 100 Foundations Business Success-1585	ENGL 098 College-Ready English I-2600, 2605, 2610, 2615, 2625	
BUS& 101 Introduction to Business-1690, 1705	ENGL 099 College-Ready English II-2640, 2645	
BUS 119 Business Communications-1600, 1605	ENGL& 101 English Composition I-2735, 2750, 2755, 2770, 2775, 2780	
BUS 165 Salesmanship-1640		
BUS 244 Human Resource Management-1665		
BUS 264 Principles of Marketing-1670		



Figure 10.1: Lower Columbia College stand-alone list for Winter 2019

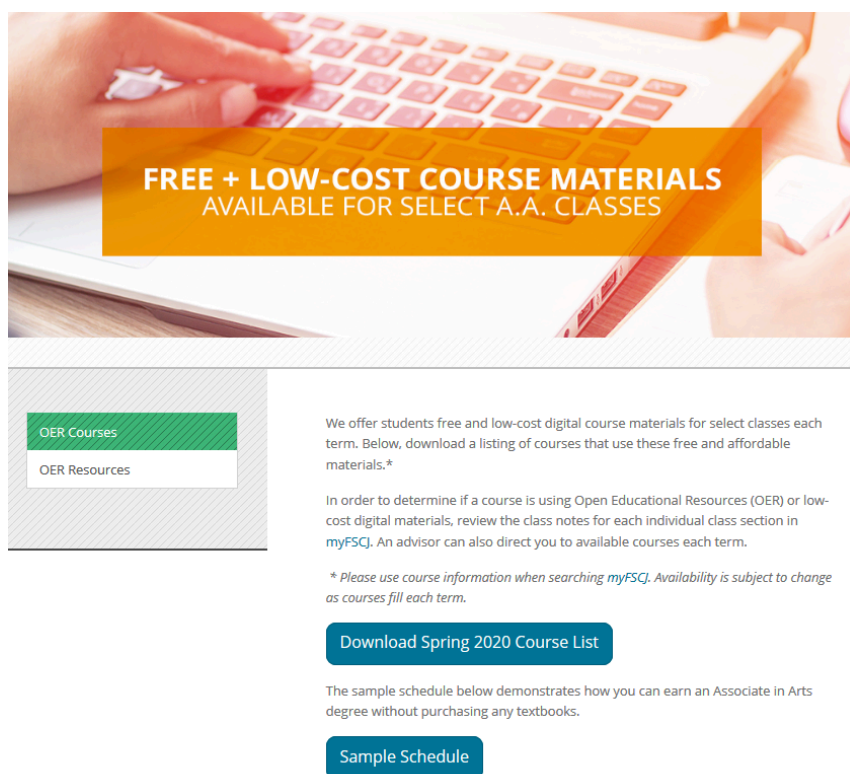
Whether a stand-alone list is adopted as a short- or long-term solution, this strategy requires analysis of many of the same considerations as platform integration, particularly those related to analyzing and articulating the impetus for the marking initiative, collecting input from stakeholders, developing a process for collecting and vetting adoption data, and communicating and marketing the availability of the list.

## SPECIAL CONSIDERATIONS

Stand-alone lists require special attention to discoverability. When this content is hosted outside the SIS, it is vital to explore opportunities for integrating communication strategies into the system students use to find and register for courses. It may be possible, for example, to post a note about the availability of open and affordable courses and link to the list from the institution's course search interface, as Lower Columbia College did. Likewise, updating relevant webpages with this content can be an effective strategy for information sharing. Possible targets for



webpage integration include frequently asked questions, money management and financial aid, graduation help, and/or recruitment and orientation sites. For example, Florida State College at Jacksonville links to information about **open educational resources (OER)**, including a stand-alone list, from their homepage for Academics (fig. 10.2). The approach can be particularly useful to potential students if information about use of open and affordable courses is otherwise locked in an SIS that is password restricted.



The image is a screenshot of a webpage. At the top, there is a banner with a background image of hands typing on a laptop keyboard. Overlaid on this is a semi-transparent orange box with the text "FREE + LOW-COST COURSE MATERIALS AVAILABLE FOR SELECT A.A. CLASSES" in white, bold, sans-serif font. Below the banner, on the left, is a sidebar with a green header "OER Courses" and a white button "OER Resources". To the right of the sidebar, the main content area has a heading "We offer students free and low-cost digital course materials for select classes each term. Below, download a listing of courses that use these free and affordable materials.\*" followed by a paragraph: "In order to determine if a course is using Open Educational Resources (OER) or low-cost digital materials, review the class notes for each individual class section in myFSCJ. An advisor can also direct you to available courses each term." Below this is a blue button "Download Spring 2020 Course List". Further down, another paragraph reads: "The sample schedule below demonstrates how you can earn an Associate in Arts degree without purchasing any textbooks." followed by a blue button "Sample Schedule".

**FREE + LOW-COST COURSE MATERIALS**  
AVAILABLE FOR SELECT A.A. CLASSES

OER Courses  
OER Resources

We offer students free and low-cost digital course materials for select classes each term. Below, download a listing of courses that use these free and affordable materials.\*

In order to determine if a course is using Open Educational Resources (OER) or low-cost digital materials, review the class notes for each individual class section in myFSCJ. An advisor can also direct you to available courses each term.

\* Please use course information when searching myFSCJ. Availability is subject to change as courses fill each term.

[Download Spring 2020 Course List](#)

The sample schedule below demonstrates how you can earn an Associate in Arts degree without purchasing any textbooks.

[Sample Schedule](#)

Figure 10.2: Florida State College at Jacksonville's Academics webpage

Additional logistics to consider include where the content will be hosted, the storage capacity of the hosting site, and authorization and technical skills necessary to create and update content hosted in this location. If use of the institution's website is restricted, advocates for course markings may seek other means

for information sharing. For example, a stand-alone list created and managed by librarians may find a natural home in LibGuides, a vendor product commonly used by academic libraries to communicate research strategies, citation assistance, and other tips to library users. However, benefits such as ease of access and use may be complicated by discoverability issues that arise from hosting content outside the institution's web domain. Third-party systems may also be leveraged for creating stand-alone lists that mimic search and filtering capabilities of integrated systems.

Stand-alone lists may offer significantly more flexibility in design and branding than SIS integration. Pursuing this option presents nearly unlimited possibilities. However, adopting a stand-alone list as a long-term solution requires special attention to compliance with state legislation or system policy, which may mandate integration with central systems. Distributing a physical copy of the stand-alone list also requires that advisers and other stakeholders always have an updated copy. Some institutions choose to use both system integration and a stand-alone list, though doing so may increase the likelihood of error as course details change over time, as discussed in the Kwantlen Polytechnic University case study. In this situation, students should be directed to the official information source for course information. To reduce error due to schedule changes, list creators should consider including only the information necessary to identify the course, eliminating details that may change throughout the registration process (e.g., location and capacity). Florida State College at Jacksonville's downloadable list (fig. 10.3), for example, presents basic information needed to search for the course in the SIS and excludes other details such as classroom location, meeting days, and meeting times.

## FSCJ Spring Term 2020 OER Courses

Please note the class number for each course you wish to register for. Then, use this information to register at [my.fscj.edu](http://my.fscj.edu).

SUBJECT	CATALOG	SESSION	CLASS #	COURSE TITLE	MODALITY	FACULTY
AMH	2010	C7	5658	United States History to 1877	Hybrid - Cecil	Purificato
AMH	2010	C7	2568	United States History to 1877	Online	Taylor, Wyatt
AMH	2020	C7	2517	U.S. History from 1877 to Pres	Hybrid - DWC	Veth
AMH	2020	C7	2521	U.S. History from 1877 to Pres	Hybrid - DTN	McCoy
AMH	2020	1	2998	U.S. History from 1877 to Pres	Online	Taylor
AMH	2020	1	3003	U.S. History from 1877 to Pres	Online	Vogt
AMH	2020	1	3006	U.S. History from 1877 to Pres	Online	McMichael
AMH	2020	A7	3015	U.S. History from 1877 to Pres	Online	Bridges
AMH	2020	A7	3023	U.S. History from 1877 to Pres	Online	Schuchman
AMH	2020	B12	3034	U.S. History from 1877 to Pres	Online	Crews
AMH	2020	B12	3040	U.S. History from 1877 to Pres	Online	Hansen
AMH	2020	C7	3042	U.S. History from 1877 to Pres	Online	McMichael
AMH	2020	C7	3048	U.S. History from 1877 to Pres	Online	Crews
AMH	2020	C7	3054	U.S. History from 1877 to Pres	Online	Bridges
AMH	2020	C7	6221	U.S. History from 1877 to Pres	Online	Hansen

Figure 10.3: Florida State College at Jacksonville's stand-alone list of free and low-cost course materials



## PART IV.

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# BRANDING AND COMMUNICATION

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Using open and affordable **course markings** in the **schedule of classes** can help students locate courses and make tracking **open educational resource (OER)** use easier; however, making this change can be challenging for institutions, as they must ensure all stakeholders are aware of the changes to the schedule of classes and why they are significant. This section will extend the discussion of talking points in Chapter 6 (Talking Points) to address issues that institutions might face when building a brand and running a systematic communication campaign for marking open and affordable course markings. Management of communication and branding will be explored before, during, and after the launch of open and affordable markings in the **course schedule**, and will give an overview of marking branding options.



## CHAPTER 11.

### PLANNING

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#### KNOWING YOUR AUDIENCE

The first point of consideration when creating a marketing strategy is understanding the audiences for any given message. For open and affordable **course markings**, this means understanding the general climate and institutional context around course materials affordability and **open educational resources (OER)**. For example, any existing outreach should be reviewed as an important component of launching a new marketing promotion. If no general outreach on open and affordable course materials is in place, a plan to raise awareness throughout the institution is paramount.

Initiative coordinators should gather data about awareness of low-cost resources among faculty and students at the campus level and use it to inform the creation of introductory messaging. If awareness is already high, then messaging can focus on the specifics of the open and affordable course markings initiative. If awareness is middling to low, as is likely, messaging will need to incorporate explanatory and persuasive content about the importance of such alternative resources as OER, the benefits open and affordable resources can bring to both students and instructors, and how low-cost materials fit into broader issues of student success and retention (Fischer et al. 2015, Hilton et

al. 2016b, and Colvard, Watson, and Park 2018). Overall, communication and branding campaigns should take baseline awareness into account, raise awareness broadly, and highlight the open and affordable course marking initiative in particular.

## AWARENESS

A variety of resources are available as alternatives to high-cost college textbooks, including openly licensed materials, but many instructors are not yet knowledgeable about non-traditional resources. In the 2018 Babson College Survey, 54% of faculty reported being unaware of OER, while just 13% of faculty reported being very aware of OER (Seaman and Seaman 2018). In addition to general awareness problems, surveys have shown that instructors sometimes conflate free resources with OER. For example, instructors often assume that all library resources are OER because they are free for patrons to use. Similarly, instructors often identify free online videos, such as TED Talks, as OER, even though many such videos are under a license that does not allow for remixing. Institutions should decide how important it is for their stakeholders to understand the differences between library resources, OER, and low-cost resources, and the definitions they apply to each.

Students are also often unaware of OER and what OER can mean for their educational experience. For example, a 2018 report for the Oregon Higher Education Coordinating Commission found that only 12.5% of community college and 7.3% of public university student respondents were aware of what the acronym OER meant (Freed et al. 2018). When students are unaware of what the “OER” refers to, it can be difficult for them to understand why it matters that these resources are being marked in the first place. Furthermore, when students are aware that OER are free but unaware of their benefits beyond cost, they may wonder why all free materials are not marked “OER” in the course schedule. Because of these considerations, if a college or



university chooses to use an OER designation, the marketing and communication campaign to students must include a definition of OER, differentiating it from other alternative resources, and a clear description of OER benefits.

## PERCEPTIONS OF QUALITY

Studies like the 2018 Babson Survey Research Group survey (Seaman and Seaman 2018) have shown skepticism among instructors of OER because of a perceived lack of quality among “free” materials. A meta-analysis by John Hilton III (2016) has found that a small percentage of students have also raised concerns about the quality of OER; however, students have largely reported that they find open course materials equal to or better than traditional course materials. These findings are corroborated by a more recent study from Jaggars, Folk, and Mullins (2018), whose sample of 611 students rated the quality of their courses’ OER (e.g., text, visuals, clarity) as 3.85 on a scale of 1 (much worse) to 5 (much better) when compared to traditional textbooks.

## SWOT ANALYSIS

One helpful tool initiative coordinators should borrow from marketing professionals is a SWOT analysis. A SWOT analysis (strengths, weaknesses, opportunities, threats) is used to understand the market surrounding a product and the factors that might affect user perceptions of it. Some considerations to keep in mind when performing a SWOT analysis around an open and affordable course markings initiative are outlined below.

Strengths
-----------

- Does the campus have an existing committee or working group dedicated to open education or affordable course content?
- Are there instructors on campus who have reported using open and affordable resources with satisfactory results?
- Does the administration, campus bookstore, and other offices on campus support the open and affordable course markings initiative?

#### Weaknesses

- Have instructors on campus used open and affordable resources in their courses and reported bad results with the experience?
- Has there been difficulty breaching the topic of open and affordable resources on campus in the past?
- Do instructors on campus have a negative perception of open access or digital textbooks?

#### Opportunities

- If a course materials affordability or OER committee is present, is there a program coordinator or department chair on the OER committee?
- Can the initiative leverage instructor champions who are already using open and affordable resources to help spread positive marketing?
- Does the course schedule already have custom markings for courses that are comparable to these new designations?

### Threats

- Are instructors on campus regularly late when turning in course material choices for the next semester?
- Is it common for departments to change section instructors shortly before the start of the next semester?
- Is the OER initiative being overshadowed by more traditional affordability initiatives such as **Inclusive Access** or rental programs?

Understanding the opportunities and threats to a communication campaign on campus can help coordinators target specific messages to specific audiences. For example, if research has shown that students on campus are largely unaware of open and affordable resource use, a coordinator can prepare materials to explain the open and affordable course markings and their purpose to students. Perceptions of OER and other alternative course materials on campus are not the only things to keep in mind when developing marketing materials. Other concerns include student hunger and homelessness, average course material costs on campus, and equity issues that might be exacerbated by rising course material costs (Romo 2018).

## COMMUNICATIONS PLAN

A communications plan for the open and affordable course markings initiative should be prepared well before launch. A communications plan is a timeline of messaging strategies for targeting specific audiences with measurable goals. An institution may have broader, overarching communications

plans, and these can be helpful documents and should be consulted to ensure consistency with broader goals. A specific communications plan for the open and affordable course markings initiative should be created, however, with emphasis on messaging prior to the launch, the launch itself, and keeping momentum up after the launch.

Consider collaborating with communications professionals across the campus, such as the library, instructional design office, and the campus bookstore (see Part II [Stakeholders]), as they will have direct experience with communication planning and relevant strategies and details. Planning should also include resources (e.g., funding, staffing, and materials costs). Initiative coordinators should approach their administration with requests as early as possible and incorporate the resources needed into their communications plan. Coordinators should also consider how they will assess the effectiveness of their plan—overall and in terms of its component parts. Assessment should be used to inform future communications plans. Measure how well the deliverables were delivered and to what extent goals were met. Audiences, stakeholders, messages, and goals should evolve over time in response to assessments.

#### Key Audiences

- Who are the target audience(s)?
- What messages will appeal to each audience?
- Examples include instructors, students, and staff. More granular audiences can be identified as well (e.g., current OER adopters, student government, faculty senate).

#### Major Stakeholders

- Who should be consulted before, during, and after the launch of the campaign?
- Who might contribute funding or support for the campaign?
- Consider support offices on campus such as the learning or teaching centers or administrative offices.

#### Timeline

- When should marketing materials be created, printed, or shared?
- In what medium should specific content be shared?
- Consider creating one master timeline and a separate mini-timeline for individual audiences.

#### Overarching Goals

- What percentage of instructors should be aware of the campaign after a certain point?
- How many offices should be sharing information about the campaign by the time the initiative launches?
- Have concrete, measurable goals, which can make the plan easier to scale if the initiative does not proceed as originally planned.

#### Measurable Deliverables

- How will coordinators know they have met their goals? Potential deliverables include:
  - Presenting about the open and affordable course markings initiative at department

meetings for at least 60% of academic units on campus.

- Creating a video explaining how students can search for open and affordable course markings in the course schedule.
- Working with student-facing offices on campus to distribute fliers and share the video on their social media accounts.
- Assess the deliverables to determine how well the communication plan met its goals.

The following resources may be helpful when writing a communications plan:

- A high-level presentation from Oxford University's Public Affairs Directorate (Pearson and Culver 2016)
- An in-depth web guide from the National Council for Voluntary Organisations (2019)
- A basic overview of communications plans from the American Library Association (2012)

## CHAPTER 12.

### BRANDING

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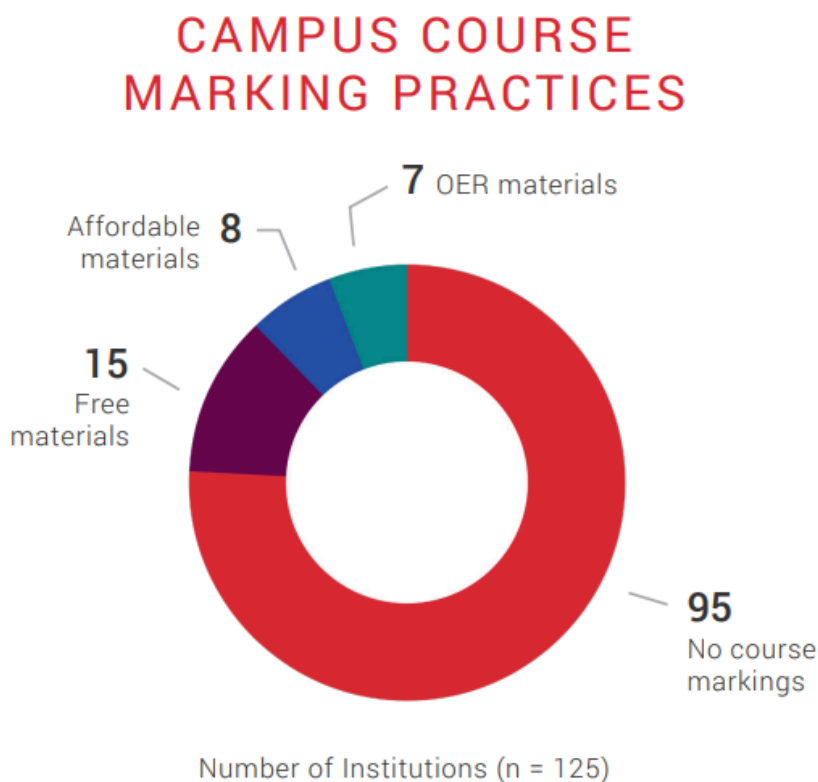
#### INITIATIVE BRANDING

Initiative coordinators should create a name for their course marking initiative in cooperation with the college or university's marketing department, especially if no larger open and affordable initiative has been named on campus. Preexisting branding of partner units or the institution may influence this decision (e.g., a mascot or slogan that lends itself well to adaptation). The scope of materials the markings will designate can also influence the naming of the marking initiative. For example, coordinators whose initiatives focus on affordability over openness may want to avoid the term "**open educational resources (OER)**" for their messaging about **course markings**. Instead, they should consider whether another term will be more recognizable. For example, Kwantlen Polytechnic University used "**Zero Textbook Cost**," which can be abbreviated to ZTC, while others have used "No-Cost/Low-Cost," or "NoLo."

#### LABELING MARKINGS

When deciding on which markings to include in a course marking initiative, coordinators should consider what will be appealing and memorable based on their institutional context. The Scholarly Publishing and Research Coalition's "2018-19

Connect OER Report” found that only 7% of institutions use an OER marking in their **schedule of classes** or **course catalog**, in contrast to 8% that mark affordable materials and 15% that mark “free” materials (SPARC 2019a; fig 12.1).



About a quarter of institutions (24%) said that they had some form of marking in their course catalog.

Figure 12.1: Campus course marking practices by percentage (SPARC 2019a)

As mentioned in Chapter 7 (Preparing for Implementation), institutions should start their course marking project by determining what open and affordable markings are most appropriate for their students and how each of those markings will be defined for their institution. To help institutions make that decision, this chapter provides an overview of the



commonly used terminology for open and affordable course markings, including arguments for and against their usage.

## OER

One of the first labels an institution might consider for its course schedule is “OER.” OER refers to educational materials that are openly licensed and free to access online. Optional print copies may be made available for purchase at a low cost. In some states (i.e., Oregon, Texas, and Colorado), the laws requiring open and affordable course markings explicitly ask that institutions label OER. In practice, these labels may use different terms for OER, but most of the open and affordable course marking programs mentioned in this volume recognize OER in some form. In addition, some colleges, like Corning Community College (fig. 12.2), have an explicit explanation of OER in their course schedule.

## Class Schedule Search

<b>Subject:</b>	<div> All  Accounting  Anthropology  Arts/History &amp; Studio  Astronomy  Auto Body  Automotive  Biology  Business General  Business/Office Technology </div>
<b>Course Number:</b>	<input type="text"/>
<b>Title:</b>	<input type="text"/>
<b>Schedule Type:</b>	<div> All  Computer Based Instruction  Experiential Learning </div>
<b>Credit Range:</b>	<input type="text"/> hours to <input type="text"/> hours
<b>Campus:</b>	<div> All  ACE  Corning Community College </div>
<b>Course Level:</b>	<div> All  Non-Credit Cont Ed  Undergraduate </div>
<b>Part of Term:</b>	<div> All  a. Full Term - 15wks  b. 1st 5 Week Modules </div>
<b>Instructor:</b>	<div> All  Abbott, Tyson K  Aikin, Michael </div>
<b>Session:</b>	<div> All  Airport Corporate Park  Bath/Avoca/Cohocton/Hammondspo </div>
<b>Attribute Type:</b>	<div> All  (OER) Open Resource Textbook </div>

Figure 12.2: Corning Community College schedule search tool showing OER as a searchable attribute

## Opportunities

Having a marking for OER in the course schedule can help spread awareness about OER on campus, and when paired with easy-to-find additional information it can also clear up misconceptions about the differences between OER and other no-cost course content. Most importantly, this marking is useful for institutions that must meet federal requirements to track

OER usage. Whether a label for OER is required by legislation or an institution simply wants to demonstrate their OER initiative's impact by showcasing its reach, including a marking for OER in the course schedule can be beneficial if it is accompanied by reliable data.

## Challenges

Although adding OER to the course schedule can help increase awareness and interest in these resources, that process will take time. Some instructors might not know what “OER” means, which makes this marking functionally useless unless and until it is explained (Seaman and Seaman 2017). Even if OER is defined in the marking's mouseover text, and a key within the course schedule itself, there is no guarantee that users will find and comprehend the information. The use of OER as a marking can increase conflation of open and free resources, particularly when the marking is applied without a vetting or mediation process, which would almost certainly entail additional labor for staff. The concern that the term “OER” is too difficult to comprehend is a valid one, but this concern can be overcome. Luckily, there are other course markings that can be adopted in addition to a course marking for OER to make the differences between “open” and “free” more clear.

## NO-COST OR ZERO TEXTBOOK COST

Some institutions utilize a term other than OER when listing courses that use them in course schedules. For example, many institutions have chosen to use a designation such as “no-cost,” “free,” or “zero textbook cost” for both free copyrighted resources and OER. These markings can be utilized to mark courses with no course material costs whatsoever; no direct textbook costs (though fees may be collected with tuition); or no course material costs aside from equipment and supplies (e.g., calculators or clickers). Regardless of the specifics, institutions applying a no-cost marking should be up-front about what is

included in their course materials cost equation and what additional costs might be required in a “no-cost” course. Figure 12.3 is an example of a no-cost icon used by multiple institutions, including Palomar College, Santa Ana College, and Yuba College.



*Figure 12.3: No cost materials icon*

No-cost markings are especially important for institutions with **Z-Degree** pathways, which use only OER and other free materials in every course needed to complete a specific degree. For institutions with Z-Degrees, no-cost markings can be used to carefully plot out a student’s choices and ensure that they save the most money possible.

### **Opportunities**

Because descriptive, plain-language markings are easy to comprehend, they are the most popular cost-related course markings in use and are present in more than half of the case studies within this volume. Apart from a recognizable message, the no-cost designation broadens what is encompassed to include not only OER but also such materials as library resources and resources already paid for through student fees. The no-cost designation covers the use of free resources when open content does not exist or is inadequate for a particular subject area. It can also promote the importance of other affordability initiatives,

such as course reserves and textbook lending programs within libraries.

## **Challenges**

Using a no-cost course marking can make educating the campus community about the markings easier, but it can also make promoting openly licensed resources more difficult (Wiley 2019b). When the conversation on campus is framed solely around cost, faculty and administrators making decisions on behalf of students may think that a non-OER no-cost option and an OER option are the same thing. However, focusing on cost alone ignores the additional freedoms that are afforded through an OER's open license. Initiatives that focus on no-cost marketing will need to more carefully explain the differences between OER and free-but-not-open content to account for this potential concern.

## **LOW COST**

Many institutions have chosen to use a designation such as “low cost” for their course markings initiative, whether stand-alone or in addition to a no-cost marking. These materials may include low-cost publisher resources that are not yet available as OER, a homework platform, or laboratory materials. Often, these materials are defined by a set dollar amount between \$25 and \$50. This low-cost threshold is determined in various ways. At Maricopa Community College, these numbers are based on feedback from surveys asking students how they define low cost (personal communication with Lisa Young 2019). This number is also sometimes decided by a legislative body. In general, it is best if the institution using a low-cost marking provides explanations of what materials are counted toward the materials cost for a course and how the cost ranking is determined. This is the case at Washington Community and Technical Colleges, who put together a set of standards for delineating whether a course counts as low-cost, based on the pre-tax retail price for course

materials, not including tools and supplies (Washington Community and Technical Colleges 2019). The Connecticut State Colleges and Universities system allows students to search for courses that are categorized as “NoLo,” meaning that they qualify as either low-cost (\$40 or less) or no-cost (fig. 12.4).

Sys	CRN	Subj	Crs	Sec	Textbook	Cred	Title	Inst	Day
A	1172	BIO*	G100	01	textbook info	3.00	Basic Biology	CCSU	
A	1344	BIO*	G105	1	textbook info	4.00	Intro to Biology - Lab	CCSU	
A	1142	BIO*	G105	1.1	textbook info	0.00	Lab 1 (PH)	CCSU	
A	1530	BIO*	G105	1.2	textbook info	0.00	Lab 2 (PH)	CCSU	
CL	1542	BIO*	G105	2	textbook info	4.00		CCSU	
CL	1137	BIO*	G105	2.1	textbook info			CCSU	
CL	1138	BIO*	G105	2.2	textbook info			CCSU	
A	1115	BIO*	G105	3	textbook info			CCSU	
A	1139	BIO*	G105	3.1	textbook info			CCSU	
A	1140	BIO*	G105	3.2	textbook info			CCSU	
A	1543	BIO*	G105	4	textbook info			CCSU	
A	1141	BIO*	G105	4.1	textbook info			CCSU	
A	1097	BIO*	G105	5	textbook info			CCSU	
A	1288	BIO*	G111	01	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1048	BIO*	G115	1	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1047	BIO*	G115	1.1	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1143	BIO*	G115	1.2	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1046	BIO*	G115	2	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1045	BIO*	G115	2.1	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1233	BIO*	G115	3	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1144	BIO*	G121	1	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1145	BIO*	G121	1.1	textbook info	NoLo	3.00	Principles of Biology	CCSU
A	1146	BIO*	G121	1.2	textbook info	NoLo	3.00	Principles of Biology	CCSU

Figure 12.4: “NoLo” labels in Connecticut State Colleges and Universities course schedule

## Opportunities

Many institutions (or legislatures) who adopt low-cost markings do so believing this information is beneficial for students. The low-cost designation allows for instructors to assign materials that may be necessary for their course (e.g., online homework platforms or lab manuals) while remaining mindful of high costs and making decisions to keep total course costs under a certain threshold. This designation is particularly useful for courses in the humanities, such as Modern Literature, where required texts are relatively affordable and cannot be replaced by openly licensed alternatives.

## Challenges

Focusing on a low-cost designator in place of no-cost and OER designators ignores some of the key benefits of OER for instructors and students. Some OER advocates argue this can cause long-term price increases as publishers shift their strategy to focus on new streams of revenue, such as online homework systems and cost-reduction models like “**Inclusive Access**” (this model is discussed in the Houston Community College case study). Although it may seem like a simple decision, there are many reasons why focusing on cost savings to the detriment of other benefits could have negative effects on both users of open content and the market surrounding it. In practice, low-cost markings are frequently adopted alongside open or no-cost designations.

## TRENDS IN AFFORDABLE COURSE MARKINGS

It is important that institutions keep the opportunities and challenges covered above in mind when branding no- and low-cost course materials in their schedule of classes. Some colleges choose to label only OER in their schedule, while others might provide an OER label as well as a no-cost or low-cost label to acknowledge the various ways in which students can save money. Depending on an institution’s context and their reasons for marking courses, the way in which they approach their course markings and what they are called may differ. Table 12.1 provides a comparative analysis of some of the case studies in Part VII and how they identify their open and affordable course markings.

**Table 12.1: Comparative analysis of course markings from case studies**

Case Study	Marking Used
Central Virginia Community College	OER. Defined loosely, OER is not limited to open materials and includes low-cost (\$40) or no textbook costs for the course.
City University of New York	Zero Textbook Costs. Describes a combination of OER and openly accessible materials and library resources.
Houston Community College	Low-Cost Textbooks (LCB) and Zero-Cost Textbooks (ZCB). LCB describes materials costing less than \$40.
Kansas State University	O icon. Identifies open or alternative resources, including open access textbooks and other high-quality OER, library resources, multimedia resources, and instructor-authored materials.
Kwantlen Polytechnic University	Zero Textbook Costs (ZTC).
Lower Columbia College	OER and Low-Cost Materials. Low-Cost Materials describes materials costing less than \$30.
Mt. Hood Community College	Low Cost and No Cost. Low Cost describes materials costing less than \$50.
Nicolet College	Low Cost and No Cost. Low Cost describes materials costing less than \$50.
State University of New York	OER. System-wide designation describes “Teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits repurposing by others.”

The majority of the case studies highlighted above use a low-cost designation with an upper cost limit in the range of \$30 to \$50. Of those that adopted an OER designation, only one of the institutions utilized the standard definition of OER, which requires the material to be in the public domain or openly licensed, free, redistributable, and without restrictions on remixing. The other institutions did not utilize the standard definition of OER, including resources with low-cost access and resources bound by traditional copyright restrictions. This may



reinforce concerns that vocabulary adopted for course markings can increase conflation of open materials and free or low-cost alternatives that still require permissions or otherwise control access.

The results from a survey tracking institutions that have implemented course markings (Finkbeiner n.d.) show slightly more robust results. Of the 44 institutions that submitted responses as of September 12, 2019, 23 indicated that they use a low-cost designation and/or a low-cost threshold (Finkbeiner 2019). When asked what threshold was used, the most popular answer was \$40 with 15 responses (65.2%). For some respondents, the threshold was equal or less than \$40, while others did not include \$40 in their cost requirements. Two of the three institutions that selected zero noted the resources would need to be available for free as a digital version in order for resources to receive the low-cost designation. Other responses included \$25 (2 responses, or 8.7%), \$50 (2 responses, or 8.7%), and \$30 (1 response, or 4.3%). Though representing a relatively small sample size, the spreadsheet suggests that \$40 is emerging as the preferred threshold. Information about how and why each institution decided on a particular threshold was not collected in the survey.

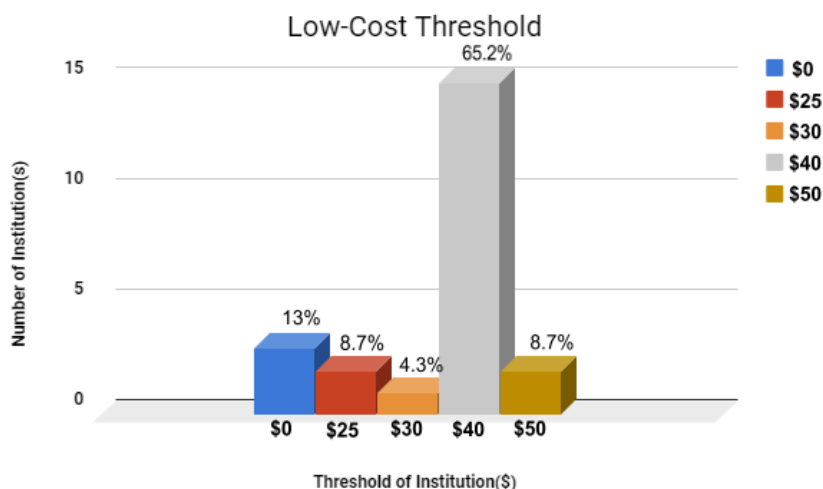


Figure 12.5: Low-cost threshold

## ICON DESIGN

Open and affordable course markings can be implemented in a variety of ways: via text or icon, as part of the course description, or in a separate column of a table layout. If it is possible to include graphics in the course schedule platform, it may be valuable to consider designing a simple icon to mark open and affordable courses. A report for the Oregon Higher Education Coordinating Commission recommends having a recognizable icon (with an explanation where appropriate) for effective branding everywhere students search for classes and course materials. This should incorporate an icon or phrase that is easily understood, not simply “OER” as students don’t always comprehend that designation without explanation (Freed et al. 2018).

Icon design should be an early consideration in the communication and branding process. Institutions may choose to use a designer on staff or hire a contract designer to create the icon. Regardless, an icon’s design should draw on a number of considerations, which are described below. These principles

were inspired and informed by Lupton and Cunningham (2014) and Lupton and Phillips (2015).

- **Simplicity:** the icon should convey meaning simply and concisely. This will ensure that it is easy to understand and remember. Avoid complexity, both in imagery and words (if present).
- **Meaning:** decide whether the icon should be straightforwardly representational, metaphor-based, or word/acronym-based. This may depend on the name of the open and affordable marking initiative and any larger course materials affordability efforts. If the icon conveys meaning in its design, be sure to incorporate alt text to ensure it meets accessibility requirements.
- **Larger branding landscape:** consider how the icon will fit in with preexisting branding of the units involved in the open and affordable course marking initiative, course materials affordability efforts at the institutional level, and the larger institution itself. This may impact design elements like shaping and color choices.
- **Color:** Consider how color choices will appear in different contexts (e.g., print vs. digital, on different devices and screens). Also, consider if meaning or definition will be lost if a viewer has any degree of colorblindness.
- **Scalability and flexibility:** Keep in mind the variety of contexts in which the icon will be used. It will need to be able to scale effectively to a variety of sizes (from 16 x 16 pixels to larger sizes for posters and other large promotional materials), mediums (digital and print), and background colors. For example, if an icon is too complex, it may be unreadable when scaled very small. Consider creating a variety of versions with different sizes, backdrops, and finishing effects for use in different contexts (e.g., scaling down for inclusion on a class

schedule, putting on a website).

Kansas State University offers an example of how an icon for open and affordable course markings can evolve to meet stakeholder needs and satisfy design requirements.



*Figure 12.6: The Open/  
Alternative Resource icon  
used by Kansas State  
University*

The design is simple and can be scaled to different sizes with ease and without losing meaning. The icon conveys meaning in a straightforward way—the book representing course materials and the “O” denoting “open.” The purple color is in keeping with Kansas State University’s institutional branding and color schemes. And the design is distinct from the normal textbook icon, thus offering a noticeable differentiation. This combination of design elements and decisions produced an icon that was agreeable to all stakeholders and met all of the design needs. See the Kansas State University case study for an in-depth explanation of their design process, including examples of less ideal icons that were not ultimately chosen.

## **MESSAGE DESIGN**

When crafting messages, always consider what is the most important information to convey. Messaging is best when it is concise and direct. Initiative coordinators should consider what response they are trying to evoke in their audiences and why the message matters. As a general rule of thumb, there should be

only one audience, one goal, and one requested action for each marketing piece. It's also important to include a point of contact so stakeholders know who to approach for questions, concerns, and feedback.

For example, if students are the primary audience for the materials, explanations about the open and affordable course markings, what they do, and how to find them will be the most important things to emphasize and should be done as simply and concisely as possible. This can be done with a Twitter campaign, small informational cards handed-out during student orientation and in academic advising, and a slogan used on campus. These materials can then point to more detailed webpages for information. A great example of a material targeted toward students is the ZedCred marketing video (Jhangiani 2019a) produced by Kwantlen Polytechnic University in British Columbia.

When communicating with faculty and staff members, it can help to focus on the benefits of the open and affordable course markings to students and instructors and how the markings work. For example, instructors will need to know how to report course adoptions, how marking designations are decided, and what types of fees or course material types need to be reported for the new designations. Mt Hood Community College has an excellent resource, the “Course Section Reporting Form and FAQ” (2020a; see fig. 12.7), that their instructors use to better understand how the low-cost course designation process works.

## Course Section Reporting Form

This form is designed to capture data on all Textbook Affordability strategies MHCC Faculty are adopting, including but not limited to the [HB2871 Mandatory Course Designations](#). Use your MyMHCC login to access the form, select the appropriate course section, and fill the form out accordingly. See the FAQ below for answers to the most common questions. Email [reference@mhcc.edu](mailto:reference@mhcc.edu) for additional help.

### Frequently Asked Questions

#### 1. Mandatory Course Designations in MHCC's Course Schedule

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#### 2. How Do I Report My Course Section?

IT and the TAT developed the online **Course Section Reporting Form** for faculty to report their course sections for three purposes:

1. Automatically map appropriate course sections with HB2871 No Cost and Low Cost designations in Jenzabar CX, to be displayed to students in the online Class Schedule at the point of registration.
2. Capture data on which course sections are using Open Educational Resources (OER) regardless of HB2871 cost thresholds.
3. Capture data on which course sections have an expensive textbook that is used for multiple terms over a sequence of classes.

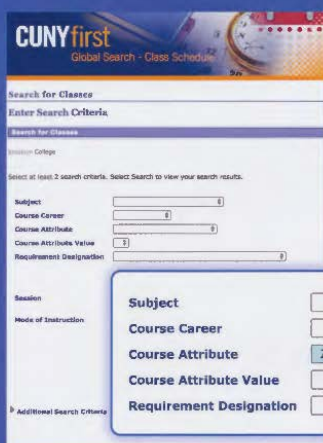
*Figure 12.7: Mt Hood Community College Course Section Reporting Form FAQ*

## MATERIALS DESIGN

There are many types of marketing materials that can be used to share information about open and affordable course markings on campus. These materials include, but are not limited to: stickers, cards, social media campaigns, slogans, websites, brochures, and flyers (fig. 12.8).

# WANT ZERO TEXTBOOK COSTS?

**Open Educational Resources (OER)** are teaching, learning, and research resources released under an open license that permits their free use and repurposing by others. OER can be textbooks, full courses, modules, videos, tests, software, or any other tool, material, or technique that supports access to knowledge



**CUNYfirst**  
Global Search - Class Schedule

Search for Classes

Enter Search Criteria

Search for Classes

College

Select at least 2 search criteria. Select Search to view your search results.

Subject

Course Career

Course Attribute

Course Attribute Value

Requirement Designation

Search

Mode of Instruction

Additional Search Criteria

## What does that mean for CUNY students?

- You will not have to purchase a textbook for this class
- Day 1 access to FREE digital course materials across all your devices
- Look for Zero Cost degree programs “Z degrees” using OER in the coming year

Search for classes using the “Zero Textbook Course” attribute.

START YOUR SEARCH HERE  
[globalsearch.cuny.edu](http://globalsearch.cuny.edu)

**CUNY** | **OER**  
Open Educational Resources

Figure 12.8: City University of New York flyer advertising ZERO Textbook Cost courses

Which material types are ultimately utilized by a campaign will depend on the audiences being targeting. For example, student groups might react better to smaller, more condensed informational materials such as cards or stickers. Conversely, instructors are likely to want more information about the initiative and how they are expected to contribute. Detailed

materials are more likely to meet instructors' needs: brochures, videos, and FAQs.

It is incredibly important to keep branding consistent across different marketing materials. By doing this, initiatives can ensure that individuals across campus will instantly recognize promotional materials as part of the open and affordable course markings initiative. Coordinators should make the central theme of the campaign clear no matter which audience individual marketing materials target.

Once materials have been developed, the next step is dissemination. Depending on the type of material and its goal (e.g., education, announcement, explanation), marketing materials may be disseminated at multiple points in the initiative's development and implementation.



## CHAPTER 13.

### IMPLEMENTATION

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This section has covered some specific concerns about branding and communication for course marking initiatives. This chapter will dive into the communication process for a **course markings** initiative, from pre- to post-launch. The considerations and examples here are presented to serve initiative coordinators as they brainstorm plans for marketing for their course markings initiative.

#### PRE-LAUNCH

The initiative coordinator should first consult the administration on campus before reaching out to other departments about marking courses. At this meeting, coordinators should prepare a pitch and an explanation of the benefits of open and affordable course markings for students, instructors, and the university. Chapter 6 (Talking Points) discusses how to assemble the pros and cons for presentation to campus shareholders and decision makers. The “big picture” plan—where open and affordable course markings are found, how they look, and who can see them—should be approved by the administration throughout the design and implementation process. This support can be leveraged later on when sharing information about the markings. Administrators are important partners for marketing campaigns because they have access to campus-wide mailing lists

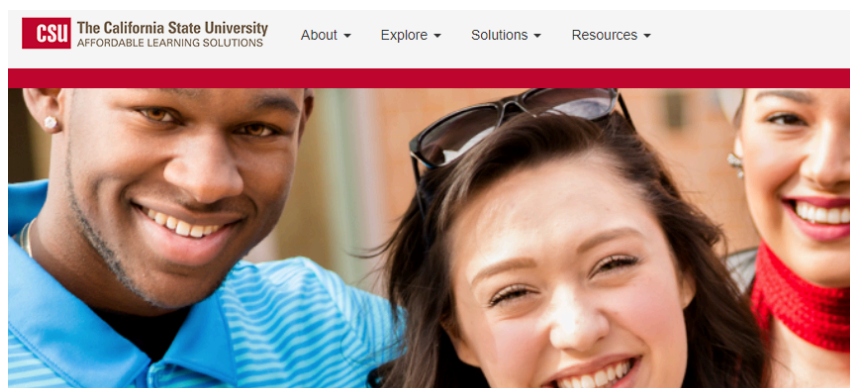
and high-level meetings that the markings implementation team may not be able to access.

Central advising center staff, division/department advising staff, and any other staff members who are in a position to help students select courses should receive regular messaging about the course materials affordability initiative and course markings throughout the implementation process. These partners will be incredibly useful both at the beginning of the course marking initiative as plans for integrating markings are made and later on when students begin to ask questions about what the markings mean.

As discussed in the Section I (Policy), in some states, open and affordable course markings are being implemented due to a legislative mandate. For example, in Texas, SB 810 requires state colleges to institute course markings for courses that use open or affordable resources. Explaining that the open and affordable course markings are being implemented because of a law can help mitigate pushback; however, it is also important to emphasize the benefits of course markings.

Before the open and affordable course markings are officially launched, coordinators prepare frequently asked questions (FAQs) and marketing materials that can be used to explain and justify the initiative's goals. Additionally, it is important to ensure that all members of the initiative team are well versed on what is happening, where, and why so they can answer questions effectively. A great example of a static FAQ page is the one provided by California State University's Affordable Learning Solutions (California State University n.d.; fig 13.1). The webpage FAQ makes it clear what the benefits of the open and affordable course markings are and why they are being implemented, stating that "our goal is to support as many students as possible in saving on the cost of their education by

utilizing the large array of low and no-cost resources readily available” (para. 5).



## Frequently Asked Questions

- **What are affordable learning solutions (AL\$)?**
  - Affordable learning solutions refers to the large array of course learning materials that are lower cost or no cost as compared to r
- **Does AL\$ only include OERs?**
  - No. AL\$ include both low cost and no cost course materials for students. This may include renting course textbooks, using digital
- **Is AL\$ for faculty or students?**
  - CSU's Affordable Learning Solutions initiative supports both faculty and students. It enables faculty to choose and provide more : access to quality free and lower cost learning materials through a variety of AL\$ programs and partnerships.
- **How can I qualify for AL\$ funding?**
  - Each CSU campus AL\$ program is designed to meet the needs of individual campuses. To learn more about the AL\$ funding rec
- **Do I need to author my own OER to participate in AL\$?**

*Figure 13.1: California State University Affordable Learning Solutions FAQ*

## COMMUNICATING WITH INSTRUCTORS

When planning pre-launch communication strategies for reaching instructors, the coordinators for the open and affordable course markings initiative should consider a variety of venues and channels. Instructors can be valuable contributors to the crafting of the language used in messaging during this stage. If they are not already major partners in the institution's course materials affordability movement, involving faculty in this step of the campaign can also help by increasing buy-in. An effective combination may include multiple forms of communication.

## Communications Strategies for Reaching Instructors

### Electronic Communication

- Faculty-wide emails
- Electronic newsletters and announcements
- Webpages and FAQs about the new system
- Video tutorials and walk-throughs about the marking process

### In-Person Communication

- Open forums and Q&As about the new system
- Meetings with deans and department heads
- Presentations at faculty senate and department-level meetings
- Training for faculty change-makers (instructors who are high profile and will champion the course markings)

### Material Communication

- Door hangers
- Posters and signage in department offices
- Small handouts (bookmark or postcard-sized) deployed throughout campus

One major component of communication with faculty will be soliciting instructors who are already using open and affordable resources to quickly adopt the open and affordable course markings upon launch (or even prior, depending on the launch strategy). Thus, some messaging for instructors will need to appeal to those who may not know what **open educational**

**resources (OER)** are, even when the instructor may already use OER in their classroom. For pre-launch messaging to instructors who are wholly unfamiliar with open and affordable resources, the coordinators of the open and affordable course markings initiative should center communications on the benefits as they relate to department and campus goals (e.g., retention, success, graduation, and basic needs) as well as student success. It's also helpful to employ data from local contexts in addition to research from larger OER initiatives and organizations to demonstrate the potential impact for students.

Implementation teams will also need to address how to communicate the process by which instructors will submit their course materials and under what criteria materials will be ruled as low-cost or OER. As mentioned in Chapter 8 (Processes), the process for instructors' use of open and affordable course markings should be as implicit and streamlined as possible. A good example of a streamlined process can be found in the case study of Houston Community College. These instructions will vary based on the system being used to share course markings, so coordinators will need to work with the staff members that manage their **student information system (SIS)** to learn what can be done at their institution. See Chapter 9 (Student Information Systems).

As implementation teams are reaching out to instructors on campus, they will need to be prepared to address concerns about open and affordable course markings as they arise, having a coherent communications plan in place for different campus entities, and plans for communicating with stakeholders as the course markings initiative nears launch.

## LAUNCH

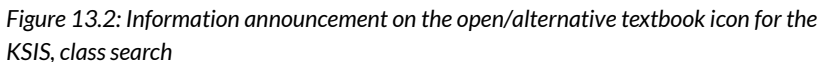
The official launch announcement is an exciting time. Major stakeholders will already know about the course markings by

now, but new instructors, transfer students, and other individuals on campus may still be confused about the changes to course material reporting and how the markings in the course schedule work.

## WORKING WITH INSTRUCTORS

Making sure instructors are on board with course designations before the markings go live is an integral step to the process of marketing a new initiative; however, keeping that momentum going during launch and ensuring that instructors report their OER adoptions and affordable resource use is also incredibly important.

Initiative coordinators can ensure that the launch announcements sent out to instructors explain the initiative concisely, while also making clear that these announcements are not the first time that the course markings have been mentioned. For example, Kansas State University released information sessions for faculty and university news articles to communicate information about their new student fee and course icon (fig 13.2). Faculty should be aware of the course markings project by now, but some will not be. Coordinators will need to be prepared for questions as these communications are shared out.



Initiative coordinators and marking teams will need to continue to make themselves visible on campus and ensure that the marketing materials and branding continue to be used after the launch phase has ended. Keeping up awareness of the markings will help increase reporting and compliance in the future.

## TALKING TO STUDENTS

The ultimate goal of an open and affordable course designation and search in an institution's course schedule is for students to use the designation to make informed choices about their courses. Marketing targeted at students will already be prepared prior to the course marking launch, but institutions will also need to plan for a sustained marketing effort as new students enter the institution each semester.

Marketing to students should focus on the basics: what the markings mean and how to use them. A great example of this type of video tutorial (Jhangiani 2019b) can be found from Kwantlen Polytechnic University. This is particularly important when technical and financial barriers result in solutions that are not easily discoverable. At the University of Texas at Arlington (UTA), for example, free and low-cost educational resource search filters were added to the **schedule of classes** in an inconspicuous location—within the system's advanced search drop-down menu under Course Attribute, as shown in the PeopleSoft section of Chapter 9, where they appear alongside other attributes such as “Honors Course” and “Lab Safety Training Required.” Technically, the search filters were easy to apply to the attribute field.

However, the lack of visibility necessitated a marketing campaign targeting students to make them aware that the attribute existed. UTA Libraries worked with student government representatives to create a flyer presenting steps for using the free and low-cost filters (fig. 13.3), which can be downloaded from the Open for UTA Students guide (Reed 2018).



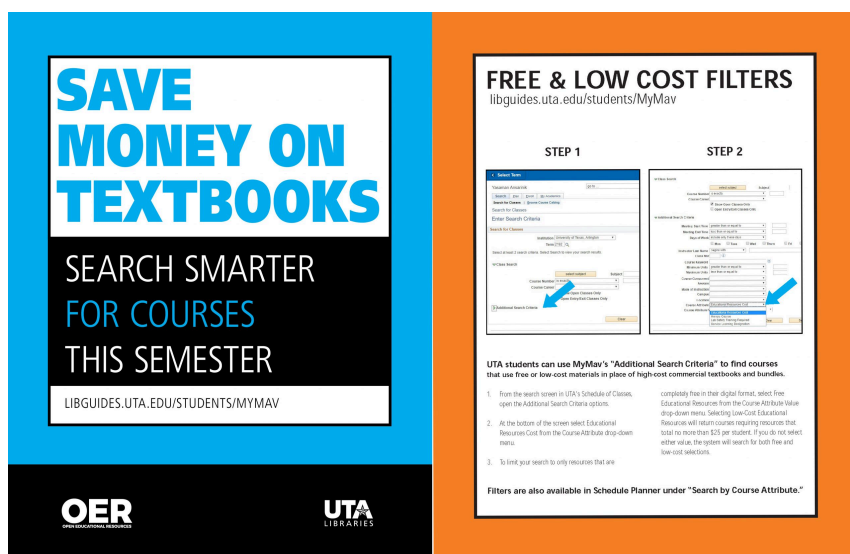


Figure 13.3: "Save Money on Textbooks" flyer from University of Texas at Arlington

The flyer is printed and disseminated to students and advisers during orientation and registration periods. Additionally, UTA libraries, along with partners in advising and money management, display information about the filters on digital monitors (fig. 13.4), via social media channels (fig. 13.5), and in student-facing newsletters (fig. 13.6) at key periods throughout the semester.

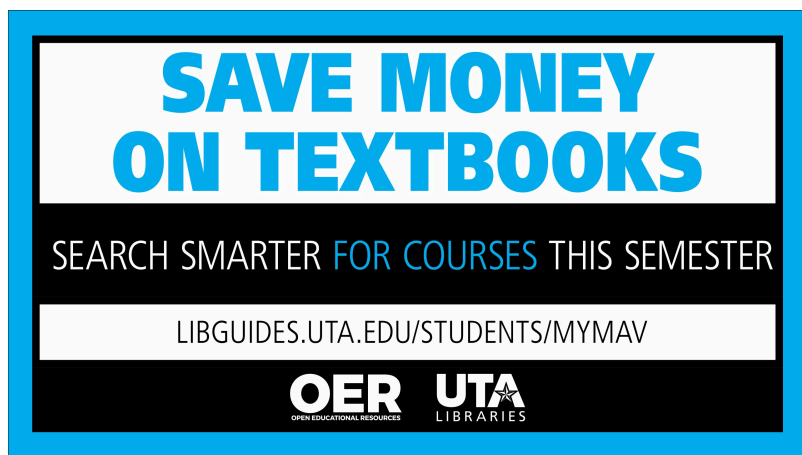


Figure 13.4: “Save Money on Textbooks” digital monitor slide from University of Texas at Arlington

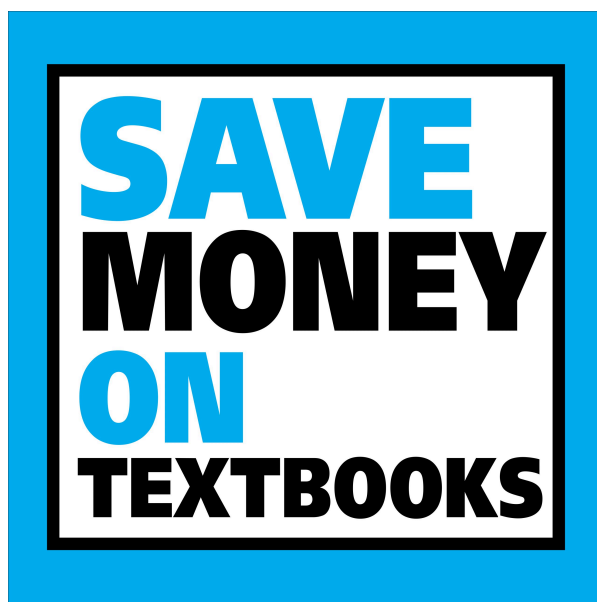


Figure 13.5 “Save Money on Textbooks” social media thumbnail from University of Texas at Arlington

TUESDAY, APRIL 2, 2019



## Student Success

Registration is open for the summer and fall terms. See the class schedule in [MyMav](#). Take one more class for a total of 15 hours and be one step closer to graduation. [Talk to your adviser](#).

You can now search for courses that utilize open education resources, which can help you save money on textbooks. [Read more](#).

*Figure 13.6: Course marking reference in the Trailblazer, the University of Texas at Arlington student newsletter*

To reach the most students possible, teams should plan and execute a variety of marketing tactics to highlight the open and affordable course designation. Some suggestions include:

- Incorporate information and training about the designation in student orientations and any other events where students are learning to use the class schedule.
- Present to the student government association or and request their help in marketing the effort to students through their communication channels.
- Pitch articles or run advertisements in student

newspapers and other publications throughout the year about the open and affordable course designation.

- Present to departments that regularly interact with students around course selection, finances, and course materials. Admissions, advising, and financial aid departments are good places to start, as well as the campus store.
- Print flyers that are distributed to students through various student support departments such as admissions, advising, financial aid, and student life.
- Print posters and flyers to disseminate around the campus.
- Present to campus residential assistants (RAs) and request they help market the effort through their communication channels.

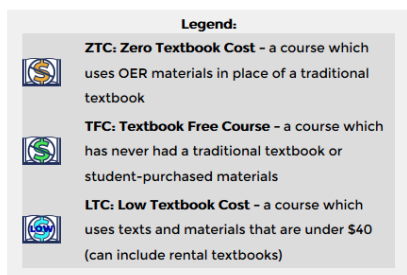
After the initial push, the communications plan will transition to more of an ongoing, sustainable flow of marketing and promotion (as opposed to the launch-focused nature it may have started with).

## **POST-LAUNCH**

Instructors, staff, and administrators will be major audiences for the ongoing promotion of the open and affordable course markings. Messaging should be prepared for returning instructors, particularly leading up to their course submission and textbook selection deadlines. New instructors will need to receive messaging via orientations, emails, or one-on-one meetings (likely in combination). An example of post-launch communications targeted at faculty is the Long Beach Community College (n.d.) faculty resource page on marking courses. This site includes contact information for support staff, descriptions of each marking that faculty can apply to their

course, and a link to update a course to include an appropriate marking (fig. 13.7).

Please contact the [OER Coordinator](#) if the status of a section changes and should no longer be designated as ZTC, TFC or LTC in the schedule of classes. Please note courses that missed the stated deadline will not be denoted with the ZTC/TFC/LTC course status icon in the schedule:



*Figure 13.7: Long Beach Community College course status explanation*

As more instructors adopt OER or low- or no-cost resources and use the course markings, consider adopting a promotional campaign to highlight adopters. Keep this kind of campaign updated with new content regularly delivered via a variety of mediums. Faculty champions can help improve the marketing strategy through feedback and advice for updates over time.

Administrators throughout campus should also be included in the ongoing communications plan. Find ways to regularly communicate the story of the course markings initiative. Include both quantitative elements (e.g., number of courses using open or affordable resources, number of dollars saved by such courses since launch) and qualitative (e.g., testimonials from instructors about how adoption has changed their teaching, testimonials from students about how low/no-cost textbook courses have changed their student experience). Consider working with department heads to continually promote the course markings to their departments and keep faculty abreast of changes over time.

## COMMUNICATION CONSIDERATIONS

Create a plan and designate a person who is responsible for continually updating and maintaining the campaign each

semester and each year so new students and instructors are aware of the search function and designation. Questions to consider:

### **Considerations for Communication with Faculty, Staff, and Administrators**

- How often should the implementation team report to administrators about the course marking initiative?
- How often should marketing materials be updated with new text or graphics? Will this timeline be different for physical and electronic media?
- How often should department presentations be given about the course marking initiative?
- Who will update FAQs, webpages, and other online resources related to the course markings?
- Who will send updates to staff in information technology, the registrar's office, financial aid, and other campus offices if the marking process changes?
- Who will coordinate and run training for instructors who have questions about the course marking process?

### **Considerations for Communication with Students**

- Who will check-in with those running student orientations to ensure the designation and search function are still a part of student orientations and other training opportunities?
- How often should the implementation team present to the student government and who will schedule those presentations?
- How often should the implementation team run ads in or pitch articles to the student newspapers and who will be responsible for contacting student reporters or placing

those ads?

- How often should the implementation team members present to departments that regularly interact with students around course selection, finances, and course materials?
- How often should presentations to RAs occur and who will schedule those presentations?
- Who will update and replenish flyers that support departments, and who will hand out flyers to students?
- Who will update and post new posters and flyers around campus?

## **SUMMARY**

Even with a successful launch and post-launch plan, the cultural change and widespread awareness-raising around open and affordable course marking will take time. Taking the time to lay a solid foundation for communication and marketing will pay off in the long run. As the initiative grows and evolves, be sure to sustain and adapt communication efforts, especially as new students, instructors, administrators, and staff join the institution. Consider how message content, methods of communication, and frequency of messaging will change as knowledge and use of the open and affordable course markings become more widespread, and how the value and impact of the course marking initiative will be measured.





## PART V.

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# IMPACT

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As evidenced by the experiences of institutions featured in Part VII (Case Studies), techniques for measuring impact for **course marking** initiatives are largely in the developmental stage. However, reports of early quantitative data and anecdotal responses have emerged as a means for assessing the success of open and affordable course marking initiatives. This section explores potential strategies for measuring impact and other potential effects of open and affordable course markings. Additionally, this section highlights a few relevant openly licensed tools and resources.



## CHAPTER 14.

### ASSESSMENT

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When **course marking** is well communicated, students have uniform and equitable access to details that allow them to make informed decisions about course registration. From an institution's perspective, course schedules act, at the most basic level, as a mechanism to organize and manage classroom space and resources. Course schedule policies explicitly aim to maximize an efficient use of space and time to meet student needs (Boise State University 2011, University of Iowa 2020). For example, Drexel University's (n.d.) course schedule policy states that their policies exist to enable students to create conflict-free schedules and to graduate in a timely manner. For many students, graduating in a timely manner is of paramount importance as the cost of tuition and fees becomes increasingly and prohibitively expensive. The cost of undergraduate tuition, fees, as well as room and board between the academic years 2006/07 and 2016/17 rose by 31% for public institutions and 24% for private institutions (U.S. Department of Education, National Center for Education Statistics 2019). While course markings primarily provide students with information to help them plan their academic program, institutions can also use them to collect data in order to evaluate its course marking program and measure other effects, including teaching loads, student behaviors, and student needs.

Open and affordable course marking initiatives may develop organically within an institution, collaboratively as a part of a consortial effort, or responsively to meet changing state legislative requirements. Recognizing the motivations that drive a particular course marking initiative is imperative in planning for and measuring success. Accordingly, open and affordable course marking initiative assessments will differ.

How the data will be used and to whom the data will be reported will determine what type of data should be collected. For instance, gathering and reporting data within a single institution will likely require codification and coordination between different departments. Standardizing the reporting mechanisms can lead to effective and reliable data collection and should be considered best practice. For those working with a consortial or statewide initiative, assessment may be complicated by the variety and type of reporting mechanisms and data collected. This was the case with the Affordable Learning Georgia (2020) program, whose impetus for implementing course markings was, in part, assessing their system-wide OER grant program. Though all 26 institutions involved in Affordable Learning Georgia use a system-wide registration system, differences in data entry processes and lack of enforcement made this impossible (Chae et al. 2019). It is advisable to have initial conversations with relevant stakeholders about what, how, and why data are to be collected and how that data can be mediated among various systems.

Creating best practices for assessing the impact of open and affordable course marking initiatives is complicated by the fact that even the most established open and affordable course marking projects are still—to some extent—under development. This chapter will outline potential strategies for measuring the impact of open and affordable course marking initiatives by discussing assessment methods, awareness, compliance with mandates, cost savings, student success, and enrollment.

## PLANNING FOR ASSESSMENT

Planning for assessment before implementing the initiative is prudent. The planning can be an informal or formal process, depending on the needs, timeline, and resources available. If the effects of a course marking initiative need to be reported to other entities, such as administrators or peer institutions, a structured approach may facilitate the process. Running through the list of questions below might be sufficient for initiatives operating without reporting requirements.

### WHAT ARE THE GOALS OF THIS COURSE MARKING INITIATIVE?

Developing goals early in the process makes it easier to conceptualize and measure their effects. Consider creating goals that are SMART—that is, specific, measurable, achievable, relevant, and time-bound. SMART goals should be specific to the needs and ability of your initiative. A sample SMART goal for an institution looking to start up a data-generating course marking program might be to establish a list of persons responsible for course marking reporting for all academic departments within six months; whereas a sample SMART goal for an institution with an established program might be to double the number of students enrolled in courses using an open or affordable textbook over the course of four semesters.

### WHO ARE THE STAKEHOLDERS?

Think about who this initiative impacts. Identifying stakeholders can help identify the target population for a survey or focus group to better identify the strengths and weaknesses of a course marking initiative. Stakeholders may include students, instructors, registrars, or partners from other units. For more detail, Part II (Stakeholders) provides a substantive overview of these groups.

## WHO ARE THE COLLABORATORS?

Collaborators are stakeholders who help implement the initiatives because they have some level of influence or power over the process. Examples of collaborators include administrators, instructors, department heads, libraries, institutional research departments, and registrar and student affairs offices. For example, students are stakeholders as users of course markings, whereas student government is a collaborator through active advocacy and feedback.

## WHAT IS THE TIMELINE OF THE COURSE MARKING INITIATIVE?

Generally speaking, creating a timeline using established goals can help keep an initiative on track. For evaluative purposes, marking specific times to evaluate and revisit specific goals, collaborations, or processes can be helpful to monitor progress and address changing needs and priorities. Since course marking is implemented in phases and dependent on collaborations with others, flexible timelines are vital. For example, since course marking requires working with specific departments, it is helpful to schedule initial meetings with key people in those departments, touch base with them throughout implementation, and check back with a post-implementation followup.

## HOW WILL I MEASURE THE DATA?

Specific questions about measuring data include deciding on what data to collect while considering stakeholders, whether the evaluation will take a quantitative or qualitative approach, and what resources are needed to collect and measure data (e.g., survey instruments, incentives, software).

## COLLECTING AND USING STUDENT DATA

Administrators, admissions, and enrollment management

departments collect a large amount of student information. This information might be used to analyze student academic cycles through student profiles, forecast academic offerings and financial state of an institution, or propose ways to improve student learning. Just as institutional review boards exist to protect research participants, instructors and administrators collecting and using student data should consider whether the collection and use of student data is ethical and necessary for the purposes of their assessment.

Though instructors adhere to the federally mandated Family Educational Rights and Privacy Act, which works to protect the privacy of students' educational records, some questions about the ethical collection and use of student data remain unanswered (Jones 2019). Newsworthy international cases such as the 2017 Equifax data breach or the 2018 Facebook-Cambridge Analytica Data Scandal exemplify how large amounts of personal data make valuable and sometime vulnerable targets for exploitation. The ethical collection and use of student data is especially important to consider when contracting with third-party vendors whose ethics may not necessarily align with those in academia. In August 2019, Senators Dick Durbin, Edward Markey, and Richard Blumenthal sent letters to educational technology companies expressing their concern about these companies' handling of student data (Durbin 2019).

The proliferation of **learning analytics**, the process of gathering and analyzing data in order to profile learners, may assist instructors in better understanding the variables that contribute to student success (Alexander et al. 2019). Most of the student data are collected through the digital interfaces of learning management systems such as Blackboard or Canvas. At an individual level, collecting student profiles could potentially help instructors, advisers, and student success staff provide early intervention through customized emails at critical points in the semester based on individual students' performance and

predictive learning analytics (Sclatar and Mullan 2017). These methods of early intervention have gained traction as institutions, facilitated by third-party vendors, actively try to figure out best practices to support student persistence, retention, and matriculation. Establishing institutional guidelines for student data collection and use is vital to preserving transparency while optimizing service.

If students' preferences for open and affordable course markings are collected in student profiles, that data could provide some insight into what types of students—traditional, adult, first-generation, or veteran, for example—might select courses that use open or affordable learning materials. With the potential benefits learning analytics may bring to supporting students, instructors must also critically consider the ways in which learning analytics are susceptible to concerns of consent, bias, privacy, and ethics. Many colleges and universities are already collecting data about students through the learning management system or tracking their location through swipe systems in order to assist students, but benevolent use does not immunize data collection from ethical scrutiny. Understanding the ways in which institutions collect and use data, while respecting students' autonomy and privacy, can help **open educational resources (OER)** practitioners better understand how collecting and analyzing open and affordable course marking data can fit into the larger landscape of learning analytics.

Collecting accurate and comprehensive student data is vital in colleges and universities where there is a heightened need for instructors to demonstrate return on invest as a result of neoliberal policies. **Neoliberalism** in academia conceptualizes higher education as a free market in which students are consumers and education is a commodity rather than a social or public good (Saunders 2007). Given decreases in funding to state colleges and universities over the last few decades (Chronicle of Higher Education 2014; Pew Trusts 2019), public institutions



increasingly rely on revenue generated by tuition and other income streams. Institutions traditionally tracked student factors such as grade point averages, major selections, number of credits enrolled, and number of credits attempted to help determine individual students' persistence and retention. Marking open and affordable courses can be another factor in attempting to understand student persistence and retention.

Institutions develop initiatives and programs, as well as collect and analyze student data, with the intention to improve students' higher education experiences. These initiatives can be especially critical in a student's first year. When administrators mark courses with designations and descriptions, they can track the implementation of institutional initiatives and analyze whether these interventions—such as offering more service learning courses—have had an impact on retention (Gardner 2002, 146). Though having this quantitative data is a valuable piece of the evaluation process for retention initiatives, the student data should be considered in connection with other factors not captured in the **student information system (SIS)**, including external factors at home or work, that also contribute to attrition. Akin to the ways in which service learning designations may function, open and affordable course markings are another form of institutional intervention which may be measured against student retention and persistence.

## **ANALYZING DATA**

Data for course marking initiatives may come from a variety of sources, such as reports from the SIS or focus groups with stakeholders involved in the course marking process. Since many reports draw data from a complex array of information sources, analyzing data requires a basic understanding of quantitative and qualitative methods and the ability to decide which method is most appropriate to use in the evaluation process. This overview of quantitative and qualitative methods will not be exhaustive

or comprehensive, but explains some basic principles one must understand when considering how to evaluate an open or affordable course marking initiative.

Qualitative methods measure observations and data that are not numerical. Some methods of gathering qualitative data include focus groups, interviews, and observation. Using qualitative methods can provide insight into processes, experiences, and perceptions. Researchers often choose qualitative methods to explain and/or create a narrative of an experience or situation. A compelling narrative or case study about student agency can be a strong indicator of the success of open and affordable course marking projects.

Quantitative methods are used to measure countable aspects of a course marking initiative—for example, the number of courses marked, the number of students enrolled in marked courses, or the number of programs or departments involved in the marking initiative. Using quantitative methods can provide valuable insight into the reach of the course marking initiative. Measuring the reach of an initiative can be particularly helpful when demonstrating value to administrators, state officials, or other stakeholders who might be potential advocates or partners. Using quantitative methods requires an understanding of descriptive statistics, inferential statistics, and confounding variables.

Statistics can be categorized as descriptive or inferential, which are used for different purposes. Descriptive statistics report the basics of what is measured. In the case of course marking, descriptive statistics might be as simple as calculating the number of open and affordable course markings. On the other hand, inferential statistics use probability theory to infer other meanings and draw new conclusions from the data set. For example, inferential statistics could be used to identify which types of students (e.g., traditional, adult, first-generation, or

veteran) are more likely to enroll in courses using an open or affordable textbook in order to graduate more quickly. Having that type of information is helpful when formulating a marketing plan (e.g., partnering with advisers who work with specific student groups). Descriptive and inferential statistics are valuable for their specific purposes.

If not accounted for, confounding variables introduce bias into the analysis by implying a correlation where there is none. When analyzing the impact that course marking has on outcomes such as student awareness, course selection, and persistence, researchers identify and control for confounding variables to mitigate against distorting the association between an exposure to course markings and an outcome (Pennsylvania State University 2018).

For example, choosing a course marked as a service learning course does not necessarily correlate to a higher interest in service learning per se. The course could be the only one offered during an opening in a student's schedule, taught by a popular instructor, or offered in a preferred format. The same is true for courses marked as using open and affordable materials. Researchers need to continually identify and control for confounding variables wherever possible to make accurate inferences. Transparency requires disclosure when it is too difficult to control for confounding variables, and this limitation must be mentioned when presenting the data to an audience of stakeholders.

Evaluating an initiative may require some familiarity with the principles and methods of data analysis. A number of open textbooks have been published on the subject. *Introductory Statistics* (Illowsky and Dean 2020) introduces the basic statistics principles necessary for data analysis.

## **ASSESSING OPEN AND AFFORDABLE COURSE**

## MARKINGS

By marking open and affordable courses through the SIS, institutions create an opportunity to perform basic assessment of courses that use open and affordable content and to run reports based on student success metrics. Running reports through the SIS reduces the possibility of sampling error and duplicative reporting processes.

The Open Education Group published the *Guidebook to Research on Open Educational Resources Adoption*, which outlines ways to measure the impact of OER on student and instructor use, cost savings, student outcomes, and perceptions of OER (Hilton et al. 2016a). The guidebook provides specific research questions and measurable variables, identifies the confounds and offers suggestions for controlling for these variables, and indicates statistical methods for analyzing the data.

The data gathered for these processes may be collected via surveys, questionnaires, reports from instructors, or reports from the SIS. The *OER Champion Playbook* (2017) includes “plays” created to help one identify and measure goals related to the impact of a program, the amount of cost savings, instructor and student satisfaction, progress and completion, as well as student learning and engagement.

Wiley (2019a) of the Open Education Group also created the “OER Adoption Impact Calculator,” with an easy to use, web-based interface that allows one to enter data fields, such as the number of enrollments using OER, the average cost of textbook(s) replaced, and the average cost spent by students using OER. This tool allows one to calculate the total textbook cost to students, the **course throughput rate**, additional tuition revenue from increased **enrollment intensity**, tuition revenue refunded to students who drop, and net change in institutional revenue. The *Guidebook to Research*, the “OER Champion

Playbook,” and the “OER Adoption Impact Calculator” are great resources for those are new to learning how to conduct basic assessment and research on OER.

Adding a course designation for open and affordable content in the course registration system and **schedule of classes** provides a mechanism for running reports to track open and affordable usage across an institution. Case studies from Houston Community College and State University of New York explicitly indicate that one of their goals in developing course marking initiatives at their respective institutions was to develop methods of tracking and reporting open and affordable course material usage. Many instructors independently adopt textbooks without a formal system set up to account for the actual number of courses marked or to assess the impact of open and affordable courses on student success. Marking the courses is the first step of collecting data in order to use that information. If institutions are solely focused on cost savings, they might choose to use descriptive statistics to measure the amount of potential cost savings, whereas other institutions might use statistical inferences to measure the impact of courses using open or affordable textbooks. Evaluating open and affordable course markings is not always straightforward, especially given the conflation and low awareness of the terms “open,” “OER,” and “affordable.” Notably, Houston Community College stopped using OER as a course marker and began marking Low Cost and Zero Cost courses. It is possible that the potential loss of the ability to untangle the impacts of OER versus affordable learning initiatives through a schedule search may have unintended detrimental effects for measuring impact. As more institutions move to include OER courses with no-cost and low-cost course markings, researchers lose the ability to differentiate the OER courses from the non-OER courses. The focus on student cost savings, as well as the cyclical and internal textbook adoption

process, makes the process of measuring impact factors beyond cost savings difficult.

## **OPEN AND AFFORDABLE RESOURCE AWARENESS**

As nascent course marking initiatives expand and new initiatives are created, program coordinators and researchers should focus on awareness of course marking among students and instructors. Evaluating course marking awareness is necessary for evaluating whether students and instructors know about open and affordable course markings and use them in making decisions. Coordinators interested in expanding course marking initiatives might consider collecting information that sheds light on the student enrollment decision-making process as a compelling argument in favor of expanding course marking to include open and affordable course designations.

There are a number of ways in which course marking initiatives can contribute to the general awareness of open and affordable concepts, materials, and programs. The act of marking open and affordable courses naturally leads to more awareness of courses that use open and affordable materials as students discover the markings in the SIS and instructors notice their peers using and talking about open and affordable materials in the classroom. Each institution represented in Part VII (Case Studies) made a conscious decision to use specific terminology when identifying OER, no-cost, and low-cost courses for their institutional audience.

The term “OER” does not mean much to the average student. Typically, policy-driven promotion of OER or open education or prioritization of OER as part of an affordable content initiative contributes to whether the course marking includes “OER” as a designator. Since implementing open and affordable course marking, Houston Community College has seen an increase in the number of courses marked. Though the increase could be

attributed to a number of external factors, marking these courses is a significant step in furthering discoverability and overall awareness across the institution.

To promote awareness, Central Virginia Community College's **schedule of classes** clearly defines OER at the point of usage (see fig. 18.1). Despite the prominent OER definition, some students mistakenly believe that courses marked as OER are delivered online. Even the instructors who adopt OER may have confusion about the term, particularly at institutions that mark zero or low cost materials. At Houston Community College, Smith notes that the number of students who were reported to be enrolled in OER courses is not accurate because many instructors were unaware of the differences between open and other affordable course materials, conflating terms and perhaps overestimating the number of students actually enrolled in OER courses.

For institutions that also use zero and low-cost designators, marketing materials and communications must be extra vigilant to prevent confusion around the terms, and program coordinators should develop a regular assessment routine to measure understanding of the terminology. Academic advisers and staff in registrar offices should be prioritized in educational outreach efforts to assist with the provision of explanations for students. Usability tests or cross-sectional focus groups could be useful mechanisms for assessing potential users' understanding of the language used. Additionally, a brief follow-up survey requested from users who have encountered marketing materials designed to explain terminology and branding would be useful in assessing the effectiveness of various outreach techniques.

In the State University of New York system, Tompkins Cortland, Fulton-Montgomery, and Dutchess Community Colleges' course registration systems provide a clickable link to a definition of OER. At Tompkins Cortland Community College, students can filter courses to "Show only OER courses."

Assessing these awareness strategies may include counting the number of clicks on the definition link or how frequently students used the “Show only OER courses” limiter.

Mt. Hood Community College and Nicolet College decided not to use OER as a designator. Instead, these campuses identify classes with affordable course materials as either No Cost or Low Cost in their registration system. Both institutions concluded that students do not clearly understand the term “OER” nor that No Cost materials are not all OER. Erie Community College also avoids using the term OER but has just one designation—an “AIM” badge—for Affordable Instructional Materials, which encompasses both OER and materials that cost less than \$30.

Clear and concise descriptions of open and affordable designations are important in understanding students’ and instructors’ awareness of open and affordable concepts. As stakeholders design awareness surveys and questionnaires, they can easily refer to the clear descriptions used in open and affordable course markings to build the most effective assessment tools.

In Chapter 2 (Legislative Implications), a 2018 report for the Oregon Higher Education Coordinating Commission noted that students were not aware of OER courses and/or the information was not available in a timely manner (Freed et al. 2018). The researchers recommended making a common form of designation across the state. A City University of New York survey indicated students were not aware they were in a **zero textbook cost (ZTC)** course. These observations support registrar professionals’ assertion that students do not closely read information in the SIS; rather, they are in the registration system to conduct business (Kitch 2015). Measuring awareness should not stop after reporting the survey results. The assessment of open and affordable course marking programs should be iterative and continuously focus on areas where



changes can potentially improve awareness. For example, the 2018 Oregon study recommendations include using a phrase or icon that is easy to understand and using it consistently in more places than just the registration system (Freed et al. 2018).

At Mt. Hood Community College, administrators specifically asked the student government association (SGA) to differentiate between OER, no cost, and low cost before implementing the course markings in the SIS. The SGA recommended definitions for each term, identifying terminology that would be easy for students to understand. This pre-course marking data collection from the target population not only provides evidence supporting the use of one set of terminology over another but also creates an early awareness of open and affordable characteristics among the target population (students) prior to rolling out the course markings.

Sometimes informal conversations with instructors or students about their usage or understanding of open and/or affordable materials can be illuminating. These comments, which are qualitative in nature, add value to an assessment report by providing more insight into the nuances of how aware instructors and students are of open and affordable concepts. Anecdotally, librarians at Lower Columbia College suggest that course marking, and the associated collaboration, outreach, and marketing performed to implement and advertise the initiative, led to greater awareness and visibility of affordable textbook initiatives on campus. Marking the courses and performing the necessary legwork to disseminate and retrieve information from instructors kept the program an active topic of campus conversations (Hicks and Gillaspay-Steinhilper, Personal communication 2018).

In “Participant Experiences and Financial Impacts: Findings from Year 2 of **Achieving the Dream's** OER Degree Initiative,” responses to surveys and site visit interviews from 2016/17 and

2017/18 indicated students were unaware of the OER course options before they registered for classes (Griffiths et al. 2018). Seven of the colleges included in the research study marked OER and ZTC in the schedule of classes or course catalog at the time of the research, and at least two of these institutions included explanations for the course labels. Twenty-four percent of students reported they saw the OER icon by the course name during registration, and 23% said cost saving was a strong factor in their enrolling in the class (Griffiths et al. 2018, 15). For institutions that approach OER course marking as a way to build awareness and promote OER courses to students, the findings from the Achieving the Dream report and several case studies seem to indicate that OER course marking alone is not enough to raise awareness levels.

In addition to SIS analytics, which show enrollment in open and affordable courses, surveys have been developed, implemented, and analyzed to understand student awareness of open and affordable course materials. Several surveys are available at the *OER Research Toolkit* (Open Education Group 2017), which are designed to identify student use of open and affordable course materials and their perception of the quality of the materials. In Achieving the Dream's student survey responses, researchers discovered that though student awareness of OER was initially low, a majority would enroll in an OER course again (Griffiths et al. 2018). A combination of SIS data and student survey responses provides a more holistic view of open and affordable course initiatives.

Assessment Tools for Cost Awareness	Assessment Method	Impact
SIS usage report	Quantitative	Tracks student hits on links/limiters for open and affordable courses
Student survey or questionnaire	Quantitative and qualitative	Descriptive of student awareness (e.g., OER, affordable, and zero-cost courses)
Instructor survey or questionnaire	Quantitative and qualitative	Descriptive of instructor awareness (e.g., OER, affordable, and zero-cost courses)

## COMPLIANCE WITH MANDATES

Chapter 2 (Legislative Implications) and Chapter 3 (Institutional Policy) discussed state and institutional mandates for institutions to mark courses within the registration system or the schedule of classes. For example, Central Virginia Community College's OER course marking initiative started because of a grant administered by the Virginia Community College System Chancellor's Innovation Fund and the Hewlett Foundation, which stipulated the need for the institution to mark the classes for the Virginia Community College System. One way to demonstrate compliance with legislative, institutional, and grant requirements is to run a usage report. Some mandates might require institutions to report the number of courses, the number of programs involved, or the overall student cost savings due to marking open and affordable courses. Marking open and affordable courses to demonstrate compliance often leads institutions to realize that collecting this data is advantageous in other ways. For instance, the grant funding from the Virginia Community College System and the Hewlett Foundation not only allowed Central Virginia Community College to implement the program, but also provided an easier way for students in the system to discover the courses and created a mechanism to report back simple data to the funding sources about adoptions across the institution.

Assessment Tools for Compliance	Assessment Method	Impact
SIS usage report	Quantitative	Adherence to governmental mandates Demonstrates achievement of institutional benchmarks and/or goals
Survey of instructors Sample survey: Bliss et al, 2013	Quantitative, qualitative, mixed methods	Number of students using open and affordable materials Cost of previous course material(s)

## STUDENTS' COST SAVINGS

Some institutions use course markings to report on student cost savings of open and affordable materials versus traditional textbooks. Mt. Hood Community College, for example, collects data on courses adopting OER and compares those numbers with campus store data to determine a general estimate of student cost savings. City University of New York's Open Education Librarian Ann Fiddler notes that though the system has seen a dramatic rise in cost savings and in the number of courses taught using OER, it has been difficult to determine how much of the cost savings can be attributed to the 3,000 ZTC sections (about 5% of the total courses offered) and how much to other more long-standing OER initiatives. Nevertheless, existing ZTC course designations can be used to run reports to measure OER usage and cost savings (Fiddler and McKinney, Personal communication 2018).

The data collected on student cost savings also may feed back into the marketing and communication efforts to promote open and affordable course marking initiatives. Whether the communications plan targets students, instructors, administrators, or external stakeholders, highlighting baseline student cost savings or trends in student cost savings over time can be an appealing part of the messaging, as evidenced by Lower Columbia College's 2016 campaign to promote the success of their **alternative educational resources** (fig. 23.1).

Assessment Tools for Cost Savings	Assessment Method	Impact
SIS usage report	Quantitative	Number of courses using open and affordable materials Number of students enrolled in courses using open and affordable materials
Student survey Sample questionnaire: Florida Virtual Campus (2016)	Quantitative	How much money students spend on textbooks Compare/track cost savings over time

## STUDENT SUCCESS

Though the question of cost requires access to systems outside of the SIS to calculate estimated savings, outcomes can be measured using the information contained within the SIS such as final grades, drops, and withdrawals for sections of courses using open and affordable course materials versus those using a traditional textbook. As mentioned in Chapter 9 (Student Information Systems), the registrar, records office, assessment program, and information technology department may have access to the SIS to run reports. In several case studies, including Mt. Hood Community College, Houston Community College, and State University of New York, institutional OER leaders also have access to the SIS to run reports. Student outcomes can also be measured by assessing course throughput rates—drop rates, withdrawal rates, and C or better rates—for sections of OER courses as compared with sections of courses taught with a traditional textbook.

Kwantlen Polytechnic University, an institution which added a course attribute field that allows students and other stakeholders to filter courses that are part of their Zed Cred program (the Canadian equivalent of the **Z-Degree**), has noted the vast potential of using this filtering mechanism to determine the impact of the overall Zed Cred program. For example, reports can be generated each semester comparing courses that have

both participating and non-participating sections in the Zed Cred program. Using these reports, insights can be gained into important metrics, including grade distributions, course withdrawals, and course failure rates.

As Hilton and colleagues (2016b, 19) explain, “while cost-savings are important to some instructors, the more vital issue relates to student learning.” Tidewater Community College implemented **ZTC courses** (or Z courses), designed for the Z-Degree program. Students see and can choose Z courses during registration. During the Fall 2013 through Spring 2015 terms, researchers compared student course throughput rates in Z courses with rates in non-Z courses (Hilton et al. 2016b) using data generated from SIS reports. The authors acknowledge the study design does not indicate causation, but the results of the study align with previous studies that indicate students perform as well or better in courses using OER as in courses using traditional textbooks (Hilton et al. 2016b, 24).

Retention is also a popular metric among institutional administrators. Nathan Smith at Houston Community College describes his close relationship with the Office of Institutional Research in tracking metrics such as grades, drops, and withdrawals. The courses are marked as low-cost, zero-cost, or **Inclusive Access** courses, and these distinctions enable the institution to compare student success in open and affordable courses with that in courses that use traditional textbooks. Data collected about open and affordable enrollment does not, by itself, indicate an effect on retention. However, open and affordable courses can be a data point in the conversation about student retention, along with student engagement practices such as service learning courses (Bringle, Hatcher, and Muthia 2010, 45) and students’ personal financial situations (Hope 2015, 12), while still controlling for confounding variables. With access to reports in the SIS, researchers can also assess student success metrics for Pell-eligible students enrolled in OER, no-cost, and

low-cost courses, which are important for assessing marginalized student persistence.

Assessment Tools for Student Success	Assessment method	Impact
SIS reports: final grades, failure rates, withdrawal rates, and Pell eligibility	Quantitative	Compare student success and persistence in open and affordable courses to comparable traditional courses
Student survey: Sample questionnaire: Jhangiani et al. (2018)	Qualitative and quantitative	Compare student responses with course performance data
Instructor report: final grades	Quantitative	Compare open and affordable courses to comparable traditional courses
Focus groups or interviews	Qualitative	Descriptive of why students choose courses marked with an open or affordable textbook

## STUDENT ENROLLMENT

Few reported assessments have been performed to determine the impact of open and affordable course marking on student enrollment; it is an area in which future stakeholders will likely choose to explore. City University of New York stakeholders have begun to consider whether course marking impacts student enrollment in certain courses. City University of New York stakeholders report that future analysis for the ZTC initiative will focus on assessing whether students register for courses specifically based on searches performed for the ZTC designation or whether they enroll in these courses for unrelated reasons. Andrew McKinney, the City University of New York open education coordinator, reports that this analysis could be done by conducting student surveys or by requesting queries performed from the registrar's office. While these quantitative and qualitative impact studies are still in the developmental phase, measuring the impact of the ZTC course marking initiative on student enrollment will remain a factor in determining future directions for City University of New York's

OER activities (Fiddler and McKinney, Personal communication 2018).

Since implementing course marking that designates courses using cost-free resources, Kwantlen Polytechnic University has seen an increase in the wait-list for Zed Cred courses over equivalent courses not participating in the program. This indication reflects student assertions that courses using cost-free resources are preferable to those with more traditional costs. Using wait-lists for Zed Cred or Z-Degree programs is one mechanism to assess the popularity or demand for courses using open and affordable materials. This type of information can be extremely compelling in demonstrating the value of marking open and affordable courses to administrators and other stakeholders who might be able to assist or expand existing initiatives. While City University of New York and Kwantlen Polytechnic University are exploring this assessment, researchers have not yet published results showing improvement in registration numbers for courses using open and affordable resources versus traditional course materials.

Assessment Tools for Enrollment	Assessment Method	Impact
SIS usage report	Quantitative	Compare open and affordable enrollment to comparable traditional course enrollment
Student survey or questionnaire	Qualitative and quantitative	Descriptive of student decision-making

### CONCLUSION

Though a handful of institutions that have recently implemented OER have shared assessments of their programs’ impact on students, instructors, and institutions, the available information on the effects of marking open and affordable courses is still scarce. Some institutions have expressed future plans to measure the impact of open and affordable course markings. For example,



Nicolet College hopes to determine if a correlation exists between No Cost/Low Cost designations and enrollment, as well as what potential effects course marking may have on the degree pathways of students. It is likely that other recent initiatives are also actively collecting and assessing impact measures to be used internally or shared with the larger academic community at a later date. Thus far, the few programs that have assessed and shared their open and affordable course marking initiatives have measured compliance with mandates, cost savings, effects on student enrollment, and awareness of open and affordable initiatives and programs.

Within the growing literature of open and affordable course marking, initiatives frequently report about their impact using narrative and case study formats, such as those found in Part VII (Case Studies). Using a narrative reporting method allows programs to combine their qualitative and quantitative data in a way that delivers statistically relevant information while also providing critical context connecting the program to local communities. The descriptive nature of the narrative format lends itself well to the potentially disparate audiences of administrators and students alike and supports student outreach and promotional communication activities. See Chapter 13 (Implementation) for more details.

Opportunities exist for institutions as they implement course marking to develop new ways to measure their impact. As these programs evolve and literature is published on the subject, demonstrable effects of course marking may encourage stakeholders at other institutions to consider and develop new open and affordable course marking ventures.



## CHAPTER 15.

### EFFECTS OF COURSE MARKING INITIATIVES

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Chapter 14 (Assessment) provides concrete examples of how to evaluate open and affordable **course markings** for compliance with mandates, students' cost savings, student success, student enrollment, and awareness of open and affordable movements. This chapter takes an exploratory perspective and speculates how marking open and affordable courses may impact students, instructors, programs, and institutions in indirect ways. Open and affordable courses may lead to changes in student agency, the promotion of open and affordable courses, faculty autonomy and academic freedom, and collaborations. This chapter elaborates on topics examined further in Part VII (Case Studies).

#### STUDENT AGENCY

As evidenced in Chapter 14 (Assessment), these markings affect students' cost savings, success in higher education, or awareness of open and affordable movements. As the case studies in Part VII suggest, students may also find an increase in student agency and choice. Marking open and affordable courses may lead to the awareness and development of **Z-Degree** programs and other pathways for students to control the cost of their educational materials.

Students generally use what information they gather to compare

courses prior to registration. Students might consider peer recommendations, instructors, meeting times and days, class locations, and whether courses are offered in person or online to create a desirable course schedule that meets their needs. Students who have other important commitments and restrictions, such as work, commuting, care giving, or student loans, can include open and affordable course markings to build an efficient and affordable schedule. Choosing a class with a lower cost textbook is one way students can minimize the amount of money they spend on course materials.

The U.S. Government Accountability Office (2013) report discusses textbook bundling, supporting the concept of student agency and choice, which also applies to the realm of course marking. Additionally, marking open and affordable courses produces transparency in allowing prospective students to compare prices, as discussed in Chapter 1 (State and Federal Legislation). Most **student information systems (SIS)** currently link out to the campus bookstore's website to provide details about the required and assigned course materials. The course within the SIS does not always contain enough information for the students to identify the correct edition of the material or its associated cost, creating a barrier to student choice. This may disproportionately impact first-generation students or international students. Marking open and affordable materials in the SIS allows students to identify courses that use free or low-cost materials quickly and easily at the point of registration.

## PROMOTION OF OPEN AND AFFORDABLE COURSES

The majority of the marketing and promotion of classes occurs through traditional systems such as the SIS, the registration system, and the **schedule of classes**. Some creative instructors and/or departments may supplement by advertising with printed flyers, departmental emails, social media, or word of mouth. In *A Handbook for Honors Programs at Two-Year Colleges*, James (2006,

45) examines the need to publicize newly created honors programs at two-year colleges to ensure program success. One such publicity technique clearly marks honors courses in course schedules and/or catalogs to reinforce the existence of the program at the time of registration (James 2006, 52), a strategy reflected by early adopters of open and affordable course marking, including several of the case studies in Part VII.

As described by James, administrators use course marking as a targeted tool to disseminate and signal important information to students at the point of registration. While the author did not provide an assessment of the effectiveness of marking courses as honors, open and affordable advocates should note the ways in which other groups on campus promote similar marking initiatives. Stakeholders may choose to designate the SIS as a marketing tool and/or assessment tool for open and affordable awareness initiatives.

In “Best Practices for Communicating Critical Messages from a Registrar’s Office to Traditional-Aged College Students,” Kitch (2015) examines effective strategies for transmitting communication from the registrar’s office to undergraduate students and how these messages can be evaluated for effectiveness. By conducting phone interviews with and surveying registrar professionals, Kitch determines that administrators can use the SIS as a means of communicating critical messages to students, but with limited effectiveness because “students will glance over it” (Kitch 2015, 71) and “Students don’t come to the SIS/Portal to read; they come to transact business and can’t be expected to read ANYTHING [emphasis in the original]” (Kitch 2015, 71). While Kitch notes that administrators should evaluate messages shared through the SIS for effectiveness, the author did not identify specific techniques that could potentially apply to open and affordable course marking. Clearly, however, registrar professionals find

communicating important information through the SIS of dubious value.

Those involved with open and affordable course marking processes should evaluate the practicality and effectiveness of course marking as a communication tool before determining the extent to which they will rely on course marking for promotion. Open and affordable advocates should examine course marking endeavors undertaken by other units on campus as an integral first step to assessing course marking as a promotional strategy. Potential assessment tools include surveys and questionnaires that focus on measuring promotional impact. While marketing through the SIS can be a valuable tool and a baseline minimum for those seeking to share information with students, programs and initiatives should include additional marketing outside of the SIS for maximum outreach.

## **INSTRUCTOR AUTONOMY AND ACADEMIC FREEDOM**

Marking OER courses may inadvertently promote academic freedom. At Houston Community College, instructors anecdotally noted that OER usage increases their ability to bypass mandated textbooks that are sometimes required at a programmatic or department level. For those at institutions with particularly strong OER support, OER coordinators may also be able to leverage the academic freedoms associated with the “5 Rs” of open creation: Retain, Reuse, Revise, Remix, and Redistribute (Wiley n.d.). This benefit may be useful in persuading those who seek more teaching autonomy and liberation from prescribed curricular content to pursue open education.

Conversely, instructors at other institutions express trepidation about openly indicating that they are using OER in the classroom, especially if they are untenured, such as in the case study from City University of New York. As discussed in Chapter 3 (Institutional Policy), Maricopa County Community

College voluntarily initiated the Maricopa Millions Project in 2013. As part of this project, the colleges created a search filter allowing students to easily find open and affordable courses (Goodman 2017). Shortly after, some instructors reported concerns that the filter might actually deter students from signing up for their classes, so the project team reduced the visibility of the course markings (Goodman 2017). Nicolet College faculty reported feeling alienated when not included in the process of promoting OER across campus and feeling pushed to compete against colleagues or select content not in the best interests of the class. At Tompkins Cortland Community College (see State University of New York case study), faculty initially had concerns about OER courses gaining popularity at the expense of courses with traditional textbooks. Since implementing the course markings, Tompkins Cortland faculty have seemingly reversed course and become quick to correct missed OER course markings.

Institutions with a state mandate to implement open and affordable course markings also report a range of responses from instructors about the process of entering the information into the system. Often, instructors initially report open and affordable courses into the SIS. If instructors misreport their course materials as OER when the materials are not OER or omit reporting when they have adopted an open or affordable resource, administrators must implement a process to vet and validate the entries. This happened at State University of New York Canton and at Mt. Hood Community College. As a result, both institutions have developed robust faculty outreach and education campaigns to train faculty how to enter their course materials into the system.

Despite the outreach efforts, Fulton-Montgomery Community College in the State University of New York system reports low faculty compliance, and much effort goes into processing the faculty self-reports. Understanding the process for how

stakeholders mark open and affordable courses becomes important for accuracy. Some institutions admit to over-reporting open and affordable courses, whereas others under-report when instructors misunderstand the terminology. See Chapter 8 (Processes) for more on this problem.

Instructors demonstrate a variety of responses to institutional participation in open and affordable course marking initiatives. Some sense a threat to their academic freedom and overall ability to select the course materials that best fit their courses, while others participate with enthusiasm. Institutions interested in understanding instructor awareness of and attitudes toward open and affordable course initiatives can implement surveys or focus groups to further discern perceptions and behavior. This type of assessment can be done prior to implementing an open or affordable course marking initiative, as understanding instructors' perceptions of academic freedoms might help strengthen the case for marking courses or anticipate questions about the impact on academic freedom or autonomy. The *OER Research Toolkit* on the Open Education Group's website provides sample surveys that can be openly adapted to conduct studies on instructor attitudes (Open Education Group n.d.). A range of opinions exist, and as these initiatives become more common and less novel, instructors' responses will likely show increasing levels of acceptance and policy compliance.

## **COLLABORATION**

Embarking on an open and affordable course marking initiative may foster collaborations between departments that might not have otherwise existed. These departments may include libraries, registrars, institutional research, instructional designers, academic departments, existing OER committees or working groups, information technology, campus stores, student affairs, advisers, student government, marketing or university relations, accessibility offices, among others. Open and affordable



advocates view this as an opportunity to leverage existing relationships across an institution and with external stakeholders such as funding agencies, state agencies, SIS vendors, and advocacy organizations. At City University of New York, the Office of Library Services took the lead on their OER initiative because of their previous experience with the **Achieving the Dream** grant. Thus, data on new collaborations that result from course marking endeavors—even those that aren't related to the markings themselves—have value. These data points also make a case to administrators that course marking initiatives result in more than changes in the schedule of classes.

Open and affordable course marking effect data can help close the loop with the instructors, staff, administrators, and partners contributing to the initiative. Open and affordable advocates may use the statistics generated from marking courses in marketing efforts to promote OER programs with instructors and students. Promoting updated open and affordable course statistics can lead to publicity and marketing opportunities, and reports generated from open and affordable course markings are valuable in conversations with stakeholders to ensure continued support for initiatives. Course marking data also demonstrates compliance with state and institutional mandates, which builds goodwill among collaborators. Part IV (Branding and Communication) details the life cycle of the communication plan for open and affordable course marking, and sharing the effect data publicly as part of this life cycle spreads awareness and can be used to support additional funding and program growth.

## CONCLUSION

The motivation for open and affordable movements stems from the desire to make learning more accessible and affordable for students, but the impact of marking open and affordable courses may be more far-reaching. The case studies in Part VII suggest

that marking open and affordable courses can impact how instructors perceive their academic freedom and autonomy; faculty negotiate self-perceptions of academic freedom in relation to their departmental or institutional cultures. Nearly every chapter in this book touches on the collaborative nature of an open and affordable course marking initiative. When embarking on any collaborative effort, the initial partnership is essential to establishing good rapport with other stakeholders and laying the foundation for future partnerships. Discussion of the potential impacts briefly explored in this chapter provides a roadmap for future assessment and research.

As open and affordable course markings become more widely implemented, researchers may identify other potential effects not already addressed in this book. We look forward to future discussions and considerations of how open and affordable course marking can enhance overall student learning and success, as well as assist instructors in their endeavor to make learning more accessible and affordable to all.

## PART VI.

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### FURTHER READING

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Students make decisions about course registration based on a combination of variables such as class time, instructor, and whether a class is required to complete a degree or to graduate. **Course markings** for open and affordable materials are a recent addition to the course registration details that provide student agency in decision making. The newness of open and affordable course marking practices, however, means that there are few publications about this topic. This section offers a short annotated bibliography of some of the most helpful resources.



## CHAPTER 16.

### COURSE MARKING SCHOLARSHIP

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The following annotated bibliography highlights several useful publications that provide additional insight into legislative compliance, systems considerations, and details about the process of implementing an open and affordable course marking initiative.

#### **PRICE TRANSPARENCY: STATE APPROACHES TO OER/ NO COST/LOW COST COURSE SCHEDULE DESIGNATORS**

Chae, Boyoung, Kevin Corcoran, Michael Daly, Ann Fiddler, Jeff Gallant, James Glapa-Grossklag, Amy Hofer, and Michelle Reed. 2019. *Price Transparency: State Approaches to OER/No cost/Low cost Course Schedule Designators*. Arlington, TX: Mavs Open Press.

Based on a panel presentation at the 16th Annual Open Education Conference in Phoenix, Arizona, in October 2019, this publication describes open and affordable course marking practices at the state and system levels. Each chapter explores the implementation of an initiative, including the impetus for the initiative, challenges, and lessons learned. Chapters cover efforts in seven states with examples from the California Community College and California State University systems; the Connecticut State Colleges and Universities system; the University System of Georgia's Affordable Learning Georgia program; City University

of New York; State University of New York; Portland Community College, Mt. Hood Community College, and Treasure Valley Community College in Oregon; University of Texas Arlington; and the State Board for Community and Technical Colleges in Washington.

## EVALUATING OREGON'S OPEN EDUCATIONAL RESOURCES DESIGNATION REQUIREMENT

Freed, Brooke, Amber Friedman, Sarah Lawlis, and Angie Stapleton. 2018. *Evaluating Oregon's Open Educational Resources Designation Requirement*. Salem, OR: University of Oregon School of Planning, Public Policy and Management.

Created for Oregon's Higher Education Coordinating Commission, this report evaluates the implementation of House Bill 2871, which required that Oregon's colleges and universities designate when courses use no-cost and low-cost course materials. The report found that "[o]verall, most students don't know where to find no-cost and low-cost courses" (Freed et al. 2018, 4). The researchers also identified the following problem areas: (a) Inconsistent language used to mark open and affordable courses makes finding these courses difficult; (b) students would like to see open and affordable courses identified across the institution (not just in the **student information system (SIS)** and **schedule of classes**); (c) students learn about open and affordable courses through their instructors but often not early enough to help with making registration decisions; and (d) the high cost of textbooks has negatively affected students academically by changing their behaviors. The study also found that community colleges are leaders in implementing course marking initiatives. The report concludes with recommendations for future research, including simplifying the course marking language, and using a standard phrase or image consistently, and marking required materials in time for registration decisions.

## OER DESIGNATIONS IN THE SCHEDULE: SYSTEM

## CONSIDERATIONS

Klaudinyi, Jen, David Koehler, Jody Potter, and Heather White. 2018. "OER Designations in the Schedule: System Considerations." Open Oregon Educational Resources. Slidedeck presented online February 21, 2018. Video, 1:12:07.

In 2018, Open Oregon hosted a webinar featuring four speakers from various community colleges located in Oregon with experience implementing **open educational resources (OER)** course marking at their respective institutions. The presenters discuss the Oregon House Bill 2871, which requires that public and community colleges prominently display courses using low- or no-cost materials in course descriptions at the time of registration. In the introductory portion of the webinar, general information surrounding the statewide initiative is addressed. Speakers identify the necessity of course marking, which enables students to make informed financial choices when planning their terms. Additionally, each of the presenters addresses practical concerns regarding the selection of designations, communication, campus store coordination, and technical implementation. Future hopes for the initiative are discussed, alongside best practices for others considering or implementing a course marking venture. Alongside the archived webinar, presenter slides are available.

## TEXAS TOOLKIT FOR OER COURSE MARKINGS (A LIVING GUIDE)

Reed, Michelle. 2019. *Texas Toolkit for OER Course Markings (A Living Guide)*. Arlington, TX: UTA Libraries. Accessed September 11, 2019.

As part of her Capstone Project for the SPARC Open Education Leadership Program, Reed developed a toolkit to provide information to Texas institutions implementing OER course marking as a result of the passage of Texas Senate Bill 810. Within this toolkit is extensive information detailing every

aspect of course marking as it applies to Texas institutions, which must comply with the bill. However, this toolkit is helpful not only to Texas colleges and universities, but also any institution in the process of considering or implementing a course marking initiative. It includes the institutional requirements that are necessary for compliance with the bill. Within the toolkit is information on relevant considerations institutions should address before beginning the implementation process. Stakeholders are provided with valuable information, successful examples of course marking implementation, and a bibliography for further reading.

## OER AND LOW-COST LABELING: IMPLEMENTATION GUIDE

Washington Community and Technical Colleges. 2019. *Implementation Guide of OER and Low-Cost Labeling Policies for Washington Community and Technical Colleges*. Report. Washington State Board for Community and Technical Colleges.

Two years after the Washington legislature passed House Bill 1375 (2017), the Washington State Community and Technical Colleges system published a formal policy and guide to assist impacted institutions in implementing open and affordable **course markings**. The implementation guide presents code names and descriptions, definitions, criteria, and use cases for using both OER and Low-Cost markings. Common questions are addressed through a Q&A section that provides links to further information, such as guidance on how to label complicated courses. For those who prefer to learn through video, a YouTube video provides a policy overview for Washington's community and technical colleges. The guide helpfully links to the studies and research briefs conducted in the state that informed the document's creation.



## PART VII.

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### CASE STUDIES

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This section provides nine examples of implementation of course materials marking from across the United States and Canada. Representing a variety of institutional types, each case study provides a unique take on the guidance provided in the preceding sections, walking readers through the thought processes, over the hurdles, and toward the successes of individuals and teams charged with implementing open and affordable course marking. Each case study concludes with recommendations for colleagues looking for ways to implement similar initiatives on their own campuses.

Case study submissions were received through an open call during Summer 2018. Because **course marking** initiatives are still relatively new, the volume's editors hoped to showcase a variety of institutions, processes, and perspectives and, thus, most case studies that focused on the implementation of course markings at higher education institutions were accepted for inclusion. Since we began working on this book, the number of institutions implementing course markings has continued to

grow. We encourage those who were not able to contribute to this volume but who wish to share their own experiences to post to the *Marking Open and Affordable Courses* discussion board (n.d.) or share on social media using the hashtag #MarkingOER.

The case studies in this volume are organized alphabetically. Each begins with a box introducing key features of the case study: type of institution, impetus for implementation, **student information system**, marking used, and unique features of their story. These boxes are color-coded to correspond to the type of institution: systems (e.g., State University of New York) in red, 2-year institutions in green, and 4-year institutions in blue. Case study authors were also asked to provide recommendations at the end of their chapter. This was almost the only guidance provided, as we wished for each institution to be able to share their experiences in their own voices.

As will be explored in the case studies, each featured institution independently selected labels and definitions for their markings. Thus, the terminology and low-cost threshold vary within the nine case studies. For example, Central Virginia Community College, uses a marking that defines OER courses as those that use open, free, and low-cost materials, including content that is not openly licensed. Other institutions define OER traditionally but attach a small fee to those courses to pay for initiatives' sustainability.

Table 1 provides an overview of the nine case studies featured in this volume, presenting key features and relevant legislation of each. We hope this summary will help readers compare case studies and find that which most closely aligns with the program needs of their own institution. Additional information on the markings used at each institution is provided in Chapter 17 (Marking Definitions).

**Table 1. Key features of nine case studies**

<b>Institution Name</b>	<b>Institution Type</b>	<b>Location</b>	<b>Legislation</b>	<b>Student Information System</b>	<b>Marking</b>
Central Virginia Community College	Community college	US - VA	VA HB 2380	In house	OER
CUNY	Public system	US - NY	State budget allocation	CUNYFirst (Peoplesoft)	"Course uses OER/Zero cost course"
Houston Community College	Community college	US - TX	TX SB 810	PeopleSoft	Low Cost (L) Zero Cost (Z) Inclusive Access (S) Z-Degree (hidden)
Kansas State University	Public 4-year	US - KS	None	KSIS (Peoplesoft)	Open/Alt Textbook
Kwantlen Polytechnic University	Public 4-year	Canada - BC	None	Banner (Ellucian)	"This course section has ZERO TEXTBOOK COSTS and is part of the Zed Cred program"
Lower Columbia College	Community college	US - WA	WA HB 1375	In house	Alternative Educational Resources
Mt. Hood Community College	Community college	US - OR	OR HB 2871	Jenzabar	Low Cost: Under \$50 No Cost: \$0
Nicolet College	Community college	US - WI	None	PowerCampus (Ellucian)	No Cost Low Cost
SUNY	Public system	US - NY	Achieving the Dream OER Degree Initiative grant; state budget allocation	Varies by school (e.g., PowerCampus [Ellucian])	OER (system-wide backend); student view varies by school



## CHAPTER 17.

### MARKING DEFINITIONS

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This chapter provides definitions of the markings used in the case studies presented in Part VII.

#### CENTRAL VIRGINIA COMMUNITY COLLEGE

Marking: OER

Definition: “OER means there are low or no textbook costs for the course. Students will use electronic materials but may have the option of purchasing printed textbooks. Students will need regular and reliable internet access in order to access the electronic resources.”

Notes: Course marking does not distinguish no- and low-cost materials from strictly defined OER materials.

#### CUNY

Marking: Zero Textbook Cost (attribute); “Course uses OER/Zero cost course” (designation)

Definition: Zero Textbook Costs (ZTC) refers to a combination of openly accessible materials and library resources.

## HOUSTON COMMUNITY COLLEGE

Marking: Textbook Savings (attribute); Low Cost (L), Zero Cost (Z), and **Inclusive Access** (S) (designations [icons]); LCB, ZCB, and Z-Degree (tags)

Definition: Low Cost Book – “This course is a Low Cost Books course. The total cost of required instructional materials in this course is less than \$40.” Zero Cost Book – “This course is a Zero Cost Books course. The total cost of required instructional materials in this course is \$0.”

Notes: Committee made a conscious decision not to tag courses as OER, but as LCB or ZCB, because faculty could be meeting the Low Cost threshold but not OER requirements. Z-Degree designations are administrative only and not visible to students.

## KANSAS STATE UNIVERSITY

Marking: Open/Alt Textbook (attribute); O icon (designation)

Definition: “Some K-State courses will include an open/alternative resource, which is a quality and affordable alternative to a textbook.”

Notes: Students pay a \$10 fee to take a course that has no-cost educational materials rather than paying for a commercial textbook. Alternative resources can include library resources, OER, multimedia, and instructor-authored materials. Materials that do not qualify include commercial textbook and textbook rentals. Materials are approved prior to marking by staff in the Open/Alternative Textbook Initiative.

## KWANTLEN POLYTECHNIC UNIVERSITY

Marking: ZTC (attribute)

Definition: “This course section has ZERO TEXTBOOK COSTS.”

Notes: The nature of the course marking (ZTC instead of OER) mirrored the program’s focus on student experience of zero textbook costs, no matter the path to get there.

## **LOWER COLUMBIA COLLEGE**

Marking: OER and Low Cost Materials

Definition: Courses marked OER use only open-access materials; Low Cost Materials total less than \$50.

## **MT. HOOD COMMUNITY COLLEGE**

Marking: Low Cost: Under \$50 and No Cost: \$0

Definition: No Cost courses use free materials and Low Cost courses use resources costing less than \$50.

Notes: Associated Student Government was consulted and requested just two designations: “Low Cost: Under \$50” and “No Cost: \$0.” They also requested that we not designate OER specifically.

## **NICOLET COLLEGE**

Marking: No Cost and Low Cost

Definition: No cost – “This section does not require you to purchase resources and may make use of electronic resources instead (may change by instructor)” and Low cost – “This section uses resources costing less than \$50.”

Notes: We decided not to include the terms “Open Education Resources” or “OER” because not all course materials were truly OER. Additionally, not all students are familiar with OER. We

wanted to use plain terms that first-time students would readily comprehend.

## **SUNY**

Marking: OER (system-wide, in SUNY Institutional Research and Information System [SIRIS]); for course catalogs, varies by institution (e.g., OER, AIM).

Definition: In SIRIS, “Open Educational Resources (OER) are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits repurposing by others. The majority of materials in this section are OER. A SUNY OER course/section provides students a cost effective alternative to traditional textbooks.” Definitions at individual institutions vary.

Notes: The SIRIS designator was specific to OER, rather than other low- or no-cost initiatives, due to the emphasis on OER in New York state funding initiatives in support of open education in relationship to the Excelsior Scholarship. Some SUNY colleges include both OER and non-OER materials in their “low-cost” designation.



## CHAPTER 18.

### CENTRAL VIRGINIA COMMUNITY COLLEGE

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JUVILLE DARIO-BECKER

#### Virginia

**Type of Institution:** Community college

**Impetus:** Zx23 grant; Achieving the Dream funding; Virginia House Bill 2380

**Student Information System:** Developed internally by college information technology personnel

**Markings Used:** OER (Type of Class); Zero and Low Cost (class attributes)

#### BACKGROUND

Central Virginia Community College (CVCC) offers two-year associates and certificate programs, as well as career and technical education degrees. Regardless of the program, the continuing rise in textbook cost has been a major hurdle for

most of our students. In Summer 2015, CVCC applied for and received the Zx23 grant from the Virginia Community College System (VCCS) Chancellor Innovation Fund and the Hewlett Foundation. The Z stands for “**zero textbook costs**” and 23 represents the number of community colleges in Virginia under the umbrella of the VCCS. The grant enabled us to redesign 12 courses as **open educational resources (OER)** courses. At CVCC an “OER course” is defined as a course that uses materials that are openly licensed, uses some additional content which is copyrighted but used with expressed permission from the copyright owners granted to the faculty on a case-by-case basis, or is taught with materials that have a total cost less than \$40. One stipulation of the grant was that these OER courses be duly identified in one form or another in the **course catalog** and in the **student information system (SIS)** for the benefit of not only CVCC students but also all VCCS students. The information technology (IT) department, website committee, webmaster, academic divisions, Office of Enrollment Management, and college bookstore manager worked together to create a course schedule that is streamlined for students interested in identifying the different course attributes. IT personnel created the CVCC internal SIS coding system that allowed for the identification and marking of OER courses in the course catalog.

CVCC implemented the **course marking** system for OER courses in Summer 2016. There was no initial data collection on how many students were actually helped by the course markings. During the same term, the college received funding from **Achieving the Dream**, which extended the initial work done with the Zx23 grant. As of 2019, CVCC offered 35 OER courses. The OER course marking currently in place is now a handy tool relied upon by students and academic advisers when developing a student’s academic course plan.

The OER course listing marks the courses that utilize OER and do not require the purchase of a textbook, as well as courses that

use low-cost learning materials. In short, some of the courses marked are taught strictly with OER, and other courses use both OER and low-cost materials. These distinctions are not apparent in the course catalog. All other courses list the cost of new, used, or rental textbooks. When students access a course in the online course listing, they can find information on the learning materials that they need, including non-textbook ancillaries such as laboratory kits and nitrile gloves. Some course attributes instruct students to communicate with the assigned professor for further details (see figs. 18.1-4).

### Class Schedule

**Term:**  
Fall 2018

**Subject:**  
All Subjects

**Location:**  
☐ Main Campus  
☐ Amherst Center  
☐ Appomattox Center  
☐ Bedford Center  
☐ Campbell Co Tech Center  
☐ JF Early College  
☐ Off Campus

**Session:**  
☐ Regular  
☐ Dynamic  
☐ First 8-weeks  
☐ Second 8-weeks  
☐ Twelve week  
☐ Fourteen week

**Type:**  
☐ Classroom  
☐ Web-based  
☐ Hybrid  
☐ Collaborate  
☐ OER\*

Submit

\* OER means there are low or no textbook costs for the course. Students will use electronic materials but may have the option of purchasing printed textbooks. Students will need regular and reliable internet access in order to access the electronic resources. If you have any questions, please contact the instructor.

Figure 18.1: Class schedule showing OER Type option

Class Attributes	Class Materials Total Cost is Zero
<b>Notes</b> This is an OER course which means there are no textbook costs for this course. Students will use electronic materials, but may have the option of purchasing printed textbooks. Students will need regular and reliable internet access in order to access the electronic resources. If you have any questions, please contact the instructor.	

Figure 18.2: Class attribute of a typical OER section that does not require the purchase of a commercial textbook

Notes	This is an OER course. Books for this course will cost less than \$40.00.
Class Actions	
Course Materials	Add to Favorites

Figure 18.3: Class attribute for OER class (less than \$40)

Class Attributes	Class Materials Total Cost is Zero
<b>Notes</b> This is an OER course, which means there are no textbook costs for this course. Students will use electronic materials but may have the option of purchasing printed textbooks. Students will need regular and reliable internet access in order to access the electronic resources. If you have any questions, please contact the instructor, TuiteJ@centralvirginia.edu.	

*Figure 18.4: Class attribute defining the requirements of an OER course and providing instructors contact information*

## REPORTING OER COURSES

Identifying and marking OER classes in the SIS is an ongoing collaborative effort among many constituents within the institution, starting with the instructor, the division administrative assistants, division deans, and the dean of enrollment management. The college does not require or assign instructors to teach their classes as OER but they are encouraged to adopt existing OER classes for teaching their assigned sections. Instructors opting to teach OER classes must inform the division administrative assistants verbally, or through other means of communication, as to which classes and sections they will be teaching the following term. Currently, there is no formal protocol or formal paperwork to be completed for teaching an OER section. In the foreseeable future, this situation will have to be addressed as CVCC continues to develop and teach additional OER courses.

## STAKEHOLDER FEEDBACK

The CVCC community is just getting used to the OER course offerings. Some academic counselors and faculty advisers are still not aware of course sections that have no textbook costs. In addition to the OER course marking in the SIS, we are also making every effort to publicize our OER initiative through promotional materials, such as OER posters and brochures (see fig. 18.5) that are now included in every high school recruitment packet the counselors hand out when they visit area high schools.



Figure 18.5: Promotional OER poster and brochure

Students who have benefited from OER courses during the past semesters are the best ambassadors for the OER initiative. Students have spoken and provided testimonials during convocation and town hall meetings on how OER courses helped them financially. They often wholeheartedly recommend OER courses to incoming and current students. Lately, some parents of early college and dual enrollment students are also beginning to inquire about OER. Moving forward, CVCC will introduce the benefits of OER and work with librarians, faculty of nearby institutions, and area superintendents, principals, teachers, and guidance counselors.

## CHALLENGES

As with any new project, CVCC has experienced growing pains as a result of the course marking initiative. These complications are often related to miscommunication, inconsistent language and misinformation, or lack of knowledge.

## MISCONCEPTIONS

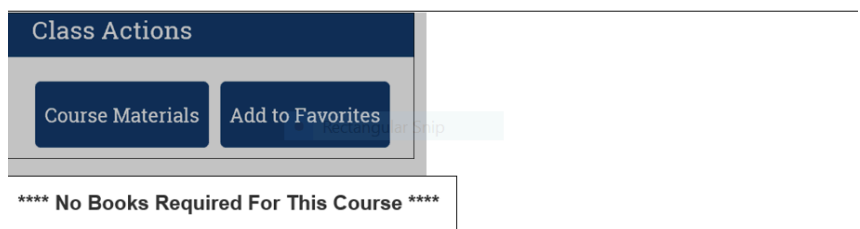
Some students believe OER-marked courses are taught only online. Consequently, they bypass or ignore these sections in

favor of the non-OER sections. Many students experience some disconnect or discomfort when it comes to accessing academic materials online. When they select their courses and check the OER button, it helps that there is a brief description about content delivery and an option to purchase a printed copy of the materials, when available. Sometimes, the assurance of print copies availability is enough to allay their fears.

## INCONSISTENT LANGUAGE AND MISINFORMATION

Another attribute of all courses taught at CVCC is a link to information on Course Materials. At this time, there are inconsistencies in the language used for different courses, even when all of these courses utilize OER.

If the individual faculty does not inform the division or the bookstore of course material preferences, the bookstore resorts to the “No Books Required for this Course” default (see fig. 18.6). This creates misinformation, leading some students to believe they do not have to read anything since there are no textbooks required. Students who are later told that they need to download a textbook after registering for a no-textbook class complain, often to the administration. Other courses may have the “Free ‘Open Educational Resources’ are required for this course. Please see your Instructor” designation included in course information. The faculty, bookstore personnel, and the webmaster will have to agree on a common language to communicate the information about the specific courses to avoid confusion.



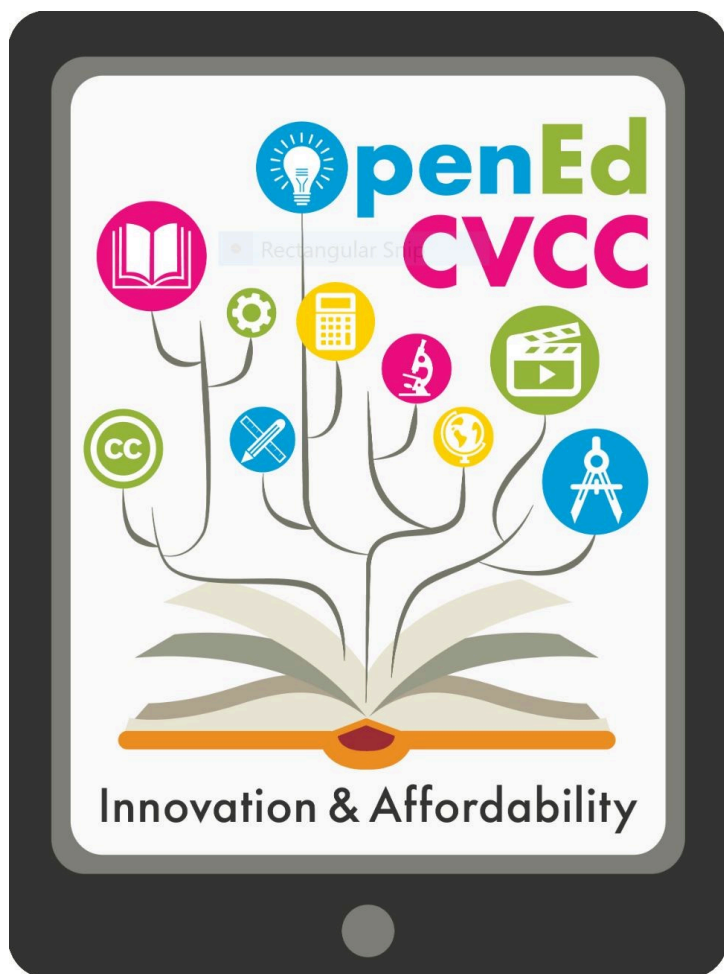
**Free "Open Educational Resources" are required for this course. Please see your Instructor.**

*Figure 18.6: Bookstore message displayed when no textbooks need to be purchased for the course*

## RECOMMENDATIONS

1. Communicate often and clearly with everyone involved in project implementation.
2. Always give IT personnel a heads up and a reasonable timeline to work on additions and changes in course markings. Once the infrastructure is in place, the day-to-day maintenance falls on the division administrative assistants, with input from individual faculty, to mark new courses or change the code of a class if the assigned faculty does not want to teach with OER. The division deans need to remind the faculty that the information available to students about the attributes of the sections they teach depends upon their timely input to administrative assistants. Information on course material availability is the responsibility of the instructor and the bookstore personnel, in collaboration with IT (usually the webmaster), to ensure the posted information on course materials is accurate.
3. When creating logos and other promotional materials, solicit input from faculty, administrators, marketing and media specialists, as well as students. In December 2018, CVCC re-named (or re-branded) the OER initiative as the "OpenEd CVCC: Innovation and Affordability" with a

newly created logo for new promotional materials (see fig. 18.7).



*Figure 18.7: Re-branded OpenEd CVCC Innovation & Affordability program logo*



## CHAPTER 19.

# CITY UNIVERSITY OF NEW YORK

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ANDREW MCKINNEY AND ANN FIDDLER

### New York

**Type of Institution:** Public system, with seven community colleges, 11 senior colleges, and six graduate and professional schools

**Impetus:** Achieving the Dream grant; state funding

**Student Information System:** CUNYFirst (PeopleSoft)

**Markings Used:** ZERO Textbook Cost (attribute); Course uses OER/  
Zero cost course (designation)

**Unique Features:** Assessment tied to open educational resources  
initiative impact tracking

## BACKGROUND

The City University of New York (CUNY) spans 24 campuses across the five boroughs in New York City, encompassing seven community colleges, 11 senior colleges, and six graduate and

professional schools. As the public university system of New York City, and the largest urban university system in the country, CUNY serves a diverse student population of over 250,000 full- and part-time students. In Spring 2016, we at CUNY's Office of Library Services (OLS), situated in the Office of Academic Affairs, applied for and received a grant from **Achieving the Dream (ATD)** to create entire **open education resource (OER)** degree pathways in three of CUNY's community colleges. This experience laid the groundwork for best practices in institutionalizing OER at CUNY. The ZERO Textbook Cost course designation (see fig. 19.1) was created in Fall 2017 in conjunction with the grant.

**CUNYfirst**  
Global Search - Class Schedule

**Search for Classes**

**Enter Search Criteria**

**Search for Classes**

Baruch College | 2019 Spring Term

Select at least 2 search criteria. Select Search to view your search results.

**Subject** Accounting

**Course Career** Undergraduate

**Course Attribute** ZERO Textbook Cost

**Course Attribute Value**

**Requirement Designation**

☒ Show Open Classes Only

**Session**

**Mode of Instruction**

☐ Fully Online

☐ Hybrid

☐ In Person

☐ Online

☐ Partially Online

☐ Web-Enhanced

**Additional Search Criteria**

**BACK CLEAR SEARCH**

Copyright 2016 | Terms of Use | College Websites

**CUNY** The City University of New York

Figure 19.1: CUNYfirst global search includes a search option for ZERO Textbook Cost

In Spring 2017, the New York State governor's office took an interest in funding OER initiatives; the result was \$4 million in

funding given to CUNY and an additional \$4 million to the State University of New York (SUNY) for the 2017/18 academic year. Funding has continued each year through the 2019/20 academic year, but the line in the budget is not permanent and funding remains contingent on legislative priorities. Given our experience administering the ATD grant it was natural that OLS would take the role of oversight and create the infrastructure for what had become a significant university-wide initiative. The goal of the initiative is large-scale course conversions throughout the system with an emphasis on high-enrollment, general education courses and OER degree pathways. OLS organizes and advises campus level representatives for every school involved in the initiative. In fact, a requirement of the schools receiving a portion of the state funding is that they designate an administrator, librarian, or faculty member who owns the project on their campus. The majority of these individuals are librarians, who are already familiar and comfortable with OLS as a centralized, service offering office.

## **PROCESS CONSIDERATIONS**

After discussions with the campus representatives about creating a ZERO Textbook Cost attribute for courses led to a consensus agreement about implementing the attribute, OLS and the University Registrar's office collaborated to make the attribute a reality. Creating the attribute in CUNYFirst, CUNY's centralized student information system, was a relatively quick and easy process. The first major task, however, was to get faculty to apply the attribute to their course in CUNYFirst, which is a process that varies from campus to campus. The course attribute must, in some way, be reported to the registrar to appear in the registration system. Faculty themselves cannot add an attribute to their course via CUNYFirst. Though faculty are required to input textbook information into CUNYFirst and can indicate that a course is not using a textbook or is using a free or open textbook, this is a separate process from marking the course

ZERO Textbook Cost in CUNYFirst. Responsibility for officially marking **zero textbook cost (ZTC)** courses, based on faculty-submitted data, is managed by the department chair or the course coordinator. That individual then communicates this to their campus registrar.

The process initially seemed simple, but it turned out to be a challenge for some campuses. OLS put together documentation to educate campus stakeholders on how to indicate a course as ZTC in CUNYFirst and shared this information on the library's website (CUNY 2020). Still, some instructors and staff members were unhappy about they felt was an additional burden. In general, the push back was communicated to both campus OER leads and OLS staff and largely centered on perceptions of unnecessary bureaucratic difficulties and a lack of clarity from campus registrars about workflow. The implementation team also heard from campus OER leads both individually and as a group at our bi-semester OER representatives meetings. OER initiative participants reported that navigating inconsistent workflows for **course marking** resulted in a significant increase in the everyone's workloads.

To alleviate the burden and deal with the fact that OLS itself does not have the appropriate permissions within CUNYFirst to assign the ZTC attribute to courses, OLS hired a part-time employee to work in the central registrar's office. Campus OER representatives sent OLS lists of courses that were part of their initiatives and would need to be coded ZTC but for a variety of reasons, such as missed deadlines or administrative confusion, had not been. These lists were then given to the registrar's office for the part-time employee to code as ZTC. In addition to coding these courses, they also searched through CUNYFirst for courses that were marked as "No textbook required" by faculty and added the ZTC attribute to them manually. Although this was a useful service for students as it correctly identified all courses in the catalog that did not require a textbook, it made the data set

produced from CUNYFirst's ZTC courses appreciably different from a data set of courses that were made ZTC via the funding that New York State gave to CUNY, as many courses that never used a textbook or for-cost course materials (like an internship) became coded ZTC.

After the first year of the state funding, we were able to streamline the ZTC coding process for a majority of CUNY campuses through a very fruitful collaboration with Akademos, the online bookstore that serves 15 of CUNY's campuses. As noted above, coding a course ZTC required the involvement of several parties, and workflows varied across campuses. However, Akademos's collaboration with OLS and the central registrar to customize their system for CUNY has significantly reduced the amount of work it takes for schools to code a course ZTC. Their customization allows instructors to select a button indicating that the course is a "Zero Textbook Cost" course (see fig. 19.2). This automatically syncs with the registration system triggering the attribute. However, even with this ease of use, problems remained. After looking closely at courses that had been designated ZTC via Akademos, OLS discovered that some instructors who had chosen the ZTC option also listed a required textbook. Although this is likely user error, it is troubling that students searching for a ZTC course could sign up for a course that might not actually be ZTC. Akademos continues to work with us to modify the system to prevent this error. All the customization that Akademos has done for OLS has been done with no additional charge to the system. We count them as a valued collaborator in our initiative.

The screenshot shows a web form titled "Your materials for:" with the course name "LIB 100 - Lib & Resch Methods" below it. There are four radio button options: "Adoptions not Required" (checked), "This course does not use books", "Course uses OER/Zero cost course" (selected), and "Other non-bookstore materials". A blue "Continue" button is at the bottom.

*Figure 19.2: Options in Akademos for designating a course as OER/Zero cost course*

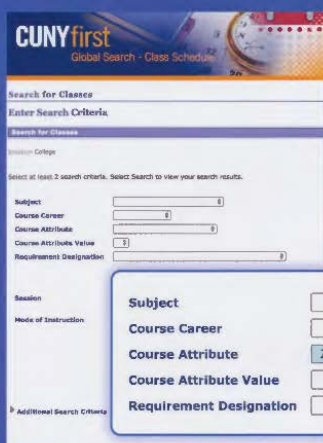
In addition to these workflow issues, we received anecdotal indications that some faculty were reluctant to list their course as ZTC because of perceived pressure from within their department. For example, a faculty member expressed trepidation at adding the ZTC designation because they felt that it would be looked down upon by the department chair and the faculty member did not have tenure. While there is strong support for the initiative, some faculty remain steadfast in their belief that students should choose courses based on the instructor rather than resource costs. The implementation team has treaded lightly around these issues. We have mostly left these conversations to individual campus representatives; we don't want this discussion to appear to faculty as is being dictated by the OLS or the central office of CUNY in general. Of course, these issues go beyond course marking and are a problem for OER initiatives writ large, but it is worth noting that our experience indicates that leaving the management of faculty-level relations to staff and other faculty on the ground is the best method of dealing with this kind of resistance.

## MARKETING

Reaching faculty and getting courses accurately coded is only half the battle. Coding efficiently makes tracking the general impact of cost savings for students much easier, but if students don't know about the ZTC attribute, impact will be limited. In order to spread the word to students, we produced a short promotional video (CUNYMedia 2018) in collaboration with the Office of Communications and Marketing at CUNY Central and used their office to produce flyers (see fig. 19.3) and bookmarks that were distributed to our campus OER leads.

# WANT ZERO TEXTBOOK COSTS?

**Open Educational Resources (OER)** are teaching, learning, and research resources released under an open license that permits their free use and repurposing by others. OER can be textbooks, full courses, modules, videos, tests, software, or any other tool, material, or technique that supports access to knowledge



**CUNYfirst**  
Global Search - Class Schedule

Search for Classes

Enter Search Criteria

Search for Classes

Choose College

Select at least 2 search criteria. Select Search to view your search results.

Subject:

Course Career:

Course Attribute:

Course Attribute Value:

Requirement Designation:

Search

Mode of Instruction

Additional Search Criteria

## What does that mean for CUNY students?

- You will not have to purchase a textbook for this class
- Day 1 access to FREE digital course materials across all your devices
- Look for Zero Cost degree programs “Z degrees” using OER in the coming year

Search for classes using the “Zero Textbook Course” attribute.

START YOUR SEARCH HERE  
[globalsearch.cuny.edu](http://globalsearch.cuny.edu)

**CUNY** | **OER**  
Open Educational Resources

Figure 19.3: City University of New York flyer advertising ZERO Textbook Cost courses

It wasn't clear, though, that these were very effective in gaining students' attention. According to a survey administered in Fall 2017 and Spring 2018 to students who were in ZTC courses at one of the senior colleges, the vast majority of students didn't actually know they were in a ZTC course when they signed up, nor were they aware of the ZTC attribute in general. As we



approach the fourth semester of the ZTC attribute's existence, we are taking steps to partner with CUNY Central's Student Affairs office to fine tune promotional materials and are beginning to network with various student leadership groups at CUNY campuses to enlist them in getting the word out to students. We hope that increasing student awareness of the ZTC attribute will increase student demand for such courses, which is ultimately a path towards sustainability for any OER or ZTC initiative.

## **RESULTS**

In a place as large and sprawling as CUNY, communication is always a challenge. As a commuter university, faculty and students come to campus only when they need to and student involvement in other aspects of academic life is limited. Therefore, reaching students and faculty is a major challenge. Although we've had some success, there is still more work to be done to fine-tune processes and try new methods of communicating the existence and importance of the ZTC attribute.

Despite these issues, use of the ZTC attribute fueled by ATD and the New York State funding has grown exponentially since its implementation in Fall 2017. In the first semester, fewer than 300 course sections used the attribute. At the time, the only way to get the attribute was to report it to the local campus registrar through a course manager or department chair. By Spring 2018, following the addition of a part-time employee in the central registrar's office, the number of courses with the ZTC attribute jumped to 1,000. By Fall 2018, there were over 3,000 sections in CUNYFirst designated ZTC. These numbers have been reviewed by CUNY Central's registrar's office to remove courses that were either marked as ZTC but still required a for-cost textbook (mostly from faculty user error in Akademos) or were courses that in manual coding had been marked as ZTC but would never

have had a textbook cost associated with them in the first place (e.g., an internship or a physical education class). Although the process of creating and using the ZTC attribute was less straightforward than expected, it has been an important process for tracking the impact of the OER funding CUNY received from ATD and New York State and for allowing students to take full advantage of these initiatives by actively searching for and choosing these courses. We still gather all of our individual campus reports and combine their individual data but we are able to cross check this with data we get from a query of ZTC courses in CUNYFirst. This gives us the ability to see the amount of ZTC courses at the university at a glance, and it also gives a more in-depth picture of both what the state funding has paid for and what kind of ZTC work has been done outside of the initiative.

## **RECOMMENDATIONS**

1. Communication with students is key. You can mark your courses as ZTC or OER, but if the students don't know about course attributes, the effort you've put into making sure that courses are marked properly will not have the impact it should. If your institution skews more toward commuter than residential this can be a particular challenge. We recommend trying to speak directly to student government, partnering with your student affairs office, and generally seeking out any office that students regularly interact with to make sure they have your promotional materials.
2. You'll need to clean out courses like internships and independent studies from your ZTC/OER course data. There are many of these courses and we benefited greatly from having someone in our registrar's office assigned specifically to this task.
3. Workflow for setting a course attribute can vary widely

from institution to institution and department to department. We recommend trying to gather as much information on this workflow as you can before attempting to implement. If there is another type of attribute in your registration system that is similar in function, such as a Writing Intensive attribute, find out who is responsible for that at the departmental level and work up from there.

4. We have benefited greatly from the work that Akademos has done around course marking in their software. Having a strong, collaborative relationship with your campus bookstore can be of tremendous value to a successful course marking initiative. Our campuses that don't use Akademos have had to shoulder a larger labor load.



## CHAPTER 20.

# HOUSTON COMMUNITY COLLEGE

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NATHAN SMITH

### Texas

**Type of Institution:** Community college

**Impetus:** Expansion of open educational resources (OER) usage across campus; Texas House Bill 810

**Student Information System:** PeopleSoft

**Markings Used:** Textbook Savings (attribute); Low-Cost (L), Zero-Cost (Z), Inclusive Access(S) (designations [icons]); LCB, ZCB, and Z-Degree (tags)

**Unique Features:** Preliminary assessment using a survey

## BACKGROUND

Houston Community College (HCC) is an open-admission public institution, awarding associate degrees and certificates in academic studies and career and technology programs.

Established in 1971, HCC serves students throughout the Houston area, Harris County, and Fort Bend County with 24 campuses in addition to many dual-credit instructional programs in local high schools. HCC students are ethnically diverse with a median age of 34 years. More than 100,000 individual students attend HCC each year, the majority of whom are part-time. HCC has the highest enrollment of international students of all two-year institutions in the nation.

HCC faculty and staff have been using and promoting **open educational resources (OER)** since the late 2000s. Despite early grassroots efforts, the college lacked a comprehensive plan to encourage OER adoption until 2015. In the summer of 2015, the vice-chancellor of instructional services (chief academic officer) created an OER capstone project, led by two academic deans, the dean of English and Communications and the dean of Social and Behavioral Sciences, as well as the associate vice-chancellor of academic instruction. This group began to explore a number of projects to unify and expand the use of OER on campus. The team identified a central goal to develop an open and affordable textbook course tagging process in the student information system, which, for HCC, is PeopleSoft.

At the time, HCC was inspired by the success of the Maricopa Millions project (Maricopa Community Colleges 2020). In the Summer of 2017, HCC piloted a Low Cost Books (LCB) course tag, targeting sections that required students to purchase materials costing a total of no more than \$40 per section, per semester. The committee worked with the information technology (IT) department to develop the required technical infrastructure and select departments were encouraged to use the tag in Summer 2017.

In early 2017, the Texas legislature passed SB 810, which mandated OER course tagging for all Texas state schools. With the LCB course tag, HCC felt it was on its way to meeting that

goal. In Fall 2017, HCC launched a zero-cost degree, or **Z-Degree**, program. The original capstone committee on OER dissolved and many of its members formed an OER steering committee, which became a key component supporting the Z-Degree program. As a result, we received early feedback on the usefulness and feasibility of the process. This case study provides a historical account of that process, current reflections, and future plans.

## **GOALS AND RATIONALE**

When HCC initially considered open and affordable course tagging, we were led by two primary objectives: (1) to promote greater use of OER and other affordable course materials and (2) to signal to students which classes in the schedule offered OER materials. Since that time, additional priorities have emerged: (3) to ensure that OER and affordable courses can be easily tracked and data requests can be easily filled and (4) to encourage departments and faculty to report OER adoptions.

Our primary objective for tagging courses was to promote the use and visibility of open and affordable instructional materials among faculty and students. There is a tight relationship between student interests and faculty incentives, especially at a community college. In particular, hiring decisions, program vitality, scheduling, and staffing all revolve around student enrollment. This is not only because tuition revenue is an important part of funding the college (at HCC, tuition represents about one-third of total revenue), but also because HCC emphasizes service to the community as a core component of its mission. The Z-Degree has been a flagship program in the promotion of OER, and promotional events as well as professional development centered on open education, open pedagogy, and OER have emerged as essential components of the initiative. Course tagging is a critical part of this larger mission to promote the adoption, use, and creation of OER.

Students are highly sensitive to textbook costs. HCC's Instructional Materials Council performs an annual survey of students' views on instructional materials. The Spring 2018 survey represents a convenience sample of 1,987 students (4.15% of possible respondents). Requests are sent through email over a two-week period with two reminders. One series of questions asks students about their preferences regarding "traditional, printed textbooks" as compared with "online (or digital) textbooks." When asked for their preferences, 48.1% of respondents agree or strongly agree with the statement, "I prefer traditional, printed textbooks to online instructional materials." However, those preferences shift noticeably when presented with changes in cost: 61.1% either agree or strongly agree with the statement, "I would prefer an online (or digital) textbook if it were cheaper than a print textbook"; 66.7% either agree or strongly agree with the statement, "I would prefer an online (or digital) textbook if it were significantly cheaper than a print textbook"; and 80.1% agree or strongly agree with the statement "I would prefer an online (or digital) textbook if it were free"; 59% of this group strongly agree.

These data show that most students are willing to sacrifice their preference for print instructional materials in exchange for a lower cost alternative. Consequently, HCC focused on attracting student interest based on cost rather than material type. The term "OER" is fairly obscure, even for most faculty. Seaman and Seaman (2017) report that 56% of faculty are unaware of OER. Faculty, however, may achieve a low-cost threshold without using OER, reinforcing our view that material type was less important than cost. Moreover, committing to an OER tag would require a course review process for each course using the tag to ensure that the materials are, in fact, openly licensed. At an institution the size of HCC, that would require significant resources. With our focus on clear and consistent communication, we elected not to tag courses as OER, but as



Low Cost Books (LCB), defined as \$40 or less for all required instructional materials. Later, we added a Zero Cost Books (ZCB) tag, defined as cost free to the student for required instructional materials. Sections tagged with LCB or ZCB may use OER—most LCB and close to all ZCB classes do in fact use at least some OER—along with other free or low-cost materials.

Once courses are tagged in the SIS, it is easy to pull data on those courses. As OER coordinator, I regularly review the schedule of tagged courses. This is critical for ensuring that Z-Degree classes are scheduled at the days, times, and locations that best serve students, and I can also audit which instructors are scheduled for these courses. Moreover, I regularly assess the enrollment of these courses for tracking and reporting purposes. And finally, I work closely with the Office of Institutional Research to track a number of key metrics to evaluate the ongoing success of the program, including student enrollment data (how many open and affordable courses students are taking), student success data (grades and withdrawals), and student persistence data (whether students continue to take free and affordable courses at HCC). Without a searchable course tag in the SIS, those data requests would be prohibitively difficult to fulfill.

Free and affordable course tagging at HCC requires faculty to report their use of open and affordable course materials to their department chairs. While this process continues to introduce challenges for implementation, it ultimately will ensure that tracking and reporting the use of free, open, and affordable materials becomes part of the regular textbook ordering practice. Anecdotally, I have heard of faculty who perceive the use of free and open materials as a way to “fly under the radar” or evade departmental or program-level guidelines on instructional materials. By requiring faculty to report their use of free, open, and affordable materials to their department chair in order to receive the benefit of clear recognition and discovery by students, the course tagging program promotes accountability

and rigor in the department while reducing the cost barrier to students.

## **PHASES OF IMPLEMENTATION**

HCC passed through a series of phases while implementing course tagging. Each phase was initiated by changing concerns in the OER program and a desire to improve tracking and communication with students. The phases were implemented over a period of two years (see fig. 20.1). The OER Steering Committee, Instructional Materials Council, and other members of the faculty and administration, participated in decision-making at each stage. The effort was led by the OER coordinator, working with the manager of applications development in IT and the associate vice-chancellor of academic instruction. HCC has a software development team in IT that helped design and execute changes to the PeopleSoft system. The fields used in course tagging already existed and were repurposed for use in this project. Once the development was complete, IT created a job aid describing how to tag courses and search for courses. The associate vice-chancellor's office circulated job aids with notices to deans, chairs, and their assistants. Additionally, he discussed plans and changes with the deans council, and I, as OER coordinator, presented the new process to the entire faculty at the August all-faculty Instructional Day meeting in 2018. I work with advisers and enrollment officers to push the word out to those who help students in registration.

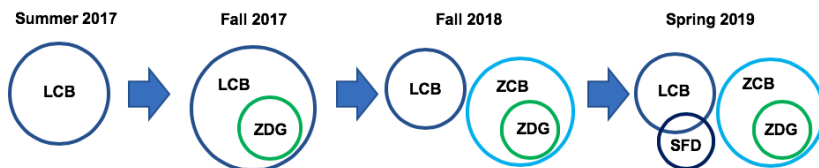


Figure 20.1: A transition of Low-Cost-Books, Zero-Cost-Books and Z-Degrees over different term periods. Circles are conceptual groupings. They do not represent the relative size of course tags. LCB – Low Cost Books, ZCB – Zero Cost Books, ZDG – Z-Degree, SFD – First Day/Inclusive Access

## Low Cost Books

The first stage of course tagging was based on the idea of identifying courses with materials costs less than \$40. HCC defines cost in terms of the total cost of purchasing required materials new from the HCC bookstore. We focused on the cost of new instructional materials purchased at the HCC bookstore for three reasons: (1) this is the only price that can be readily and consistently audited; (2) if the book is required, one cannot assume that students will be able to obtain a cheaper copy; and (3) over 65% of HCC students rely on financial aid to purchase instructional materials and financial aid only be used at the HCC bookstore. Ancillary supplies required for certain programs, such as art supplies, welding gloves, or scrubs, may exceed \$40 and are, therefore, not included in determining which courses are designated “Low Cost Books” (LCB).

In Summer 2017, three departments, English, World Languages, and Philosophy, Humanities, & Library Sciences, piloted course tagging. These departments tagged 49 sections. Department chairs and deans were responsible for tagging LCB courses when staffing. Chairs and deans have since been encouraged to staff courses prior to the beginning of student registration so that students gain the benefit of searching and registering for classes based on course tagging. Classes determined to be LCB are tagged in HCC’s PeopleSoft SIS.

Tagging is done on the “Maintain **Schedule of Classes**” page of the SIS under “Curriculum Management.” Once a particular class section has been selected, the course is tagged in two places: in the Class Attributes field (fig. 20.2) and under the Textbooks tab (fig. 20.3).

Class Attributes		Personalize   Find   View All   [Icons]   First 1-2 of 2 Last	
*Course Attribute		*Course Attribute Value	
010	010 Communication (I)	010	010 Communication (I)
LCB	Low Cost Book	LCB	Low Cost Book

Figure 20.2: Class attribute and value fields for Low Cost Books

Basic Data | Meetings | Enrollment Cntrl | Reserve Cap | Notes | Exam | LMS Data | **Textbook** | GL Interface

Course ID: 002016      Course Offering Nbr: 5  
Academic Institution: Houston Community College  
Term: Spring 2017      SCH  
Subject Area: ENGL      English  
Catalog Nbr: 1301      Composition I

Class Sections

Find | View All | First 42 of 46 Last

Session: SS      Second Start      Class Nbr: 14358  
Class Section: 0036      Component: Lecture      Event ID:  
Associated Class: 36      Units: 3.00

Textbook Assignment

Textbook Assignment Status    Pending    **Textbook entry complete**  
☐ No textbooks assigned to class    **Copy Textbooks**

Course Materials

Details | Notes

Personalize | Find | [Icons] | First 1 of 1 Last

Seq No	*Course Material Type	*Course Material Status	Title	ISBN	Author
1	Low Cost Br				

Special Instructions  
The total cost for texts in this course will be \$40 or less. Internet access may be required. Other instructional materials may not be included.

Figure 20.3: Class sections and textbook assignments under Textbook tab. Low Cost Books is entered as Course Material Type. A definition of LCB is returned in the Special Instructions note visible to students in the class schedule.

Both fields are necessary because each serves a different function in the system. The Class Attributes field enables the search filter function and allows courses to have a visible marker in the class schedule. The Textbooks field provides a written description of the tag for students when they look at the detailed description of the class they are interested in. Each of these fields also serves different functions when accessing data on tagged courses.

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Though functional, the Class Attributes field in the PeopleSoft SIS, has a significant drawback. Class Attribute tags roll over from previous semesters. If course schedules are designed using a rollover from the previous year, forthcoming courses will retain the open and affordable Class Attribute tags though course resources may no longer qualify as LCB. Our development team has to remove all affordable textbook tags from the rollover each semester. We are looking for ways to avoid this in the future.

In the first phase, when students searched the class schedule, they could identify Low Cost Books sections by the prominent green check mark next to the class description (see fig. 20.4).

[Return to Add Classes](#) NEW SEARCH MODIFY SEARCH

21 class section(s) found

* ENGL 1301 - Composition I							
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Status	Low Cost Book
10097	0002-LEC <a href="#">Second Start</a>	TuTh 11:00AM - 1:00PM	CE-San Jacinto Bldg Room 301	[REDACTED]	02/13/2017 - 05/14/2017	●	<a href="#">select</a>
11522	0008-LEC <a href="#">Second Start</a>	MoWe 12:30PM - 2:30PM	Pinemont Center Room 166	[REDACTED]	02/13/2017 - 05/14/2017	●	<a href="#">select</a>
14245	0024-LEC <a href="#">Second Start</a>	TBA	Southeast - HCC Online Room	[REDACTED]	02/13/2017 - 05/14/2017	●	<a href="#">select</a>
14250	0025-LEC <a href="#">Second Start</a>	TBA	Southeast - HCC Online Room	[REDACTED]	02/13/2017 - 05/14/2017	●	<a href="#">select</a>
14656	0031-LEC <a href="#">Second Start</a>	TBA	Southeast - HCC Online Room	[REDACTED]	02/13/2017 - 05/14/2017	●	<a href="#">select</a>
14340	0035-LEC <a href="#">Second Start</a>	TBA	Southeast - HCC Online Room	[REDACTED]	02/13/2017 - 05/14/2017	●	<a href="#">select</a>
14358	0036-LEC <a href="#">Second Start</a>	TBA	Southeast - HCC Online Room	[REDACTED]	02/13/2017 - 05/14/2017	●	✓ <a href="#">select</a>
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Status	Low Cost Book

Figure 20.4: All available English sections shown, with green check mark in Low Cost Book column

If a student hovered over the green check mark, a dialogue box would have appeared:

The total cost for texts in this course will be \$40 or less. Internet access may be required. Other instructional materials may not be included.

This description also appeared under the course details page in the Textbooks section of the course description.

### **Z-Degree**

When HCC launched its Z-Degree program in Fall 2017, the OER Committee created a ZDG course tag to identify classes as part of the Z-Degree. We decided against including this tag in the public search function, however; the general consensus of the committee was that too many search options would confuse students.

Nevertheless, the ZDG tag serves an important administrative function. Z-Degree classes at HCC are specifically assigned in a structured schedule, on a particular campus, and aligned with a degree pathway. Z-Degree schedules are assigned during the day, Monday through Thursday. While we allow exceptions, it is difficult to arrange sequential times for classes offered at different term lengths because the meeting times for those classes do not align. Consequently, not every zero cost books (ZCB) course can be in the Z-Degree. Many instructors that use free materials and OER choose to teach in the evenings, in shortened session lengths, or on Friday or Saturday.

For Z-Degree classes, department chairs were initially instructed to tag those classes as both LCB and ZDG. Classes were tagged as ZDG in the same fields as LCB—in the Class Attributes (see fig. 20.5) and Textbooks (see fig. 20.6) sections of Curriculum Management in PeopleSoft.

Class Attributes				Personalize   Find   View 2		First 1-3 of 3 Last	
Course Attribute		Course Attribute Value					
010	010 Communication (I)	010	010 Communication (I)			+	-
ZDG	Z-Degree Program	ZDG	Z-Degree Program			+	-
ZCB	Zero Cost Books	ZCB	Zero Cost Books			+	-

Figure 20.5: Class Attributes for Z-Degree Program (ZDG) and Zero Cost Books (ZCB)

Course Materials		Details	Notes
Seq No	Course Material Type	Course Material Status	Title
1	<div> <div></div> <div>Low Cost Books</div> <div>Z-Degree</div> <div>Zero Cost Books</div> </div>		

Figure 20.6: Drop-down menu for Low Cost Books, Z-Degree and Zero Cost Books under Course Materials

## Zero Cost Books

As use of free resources expanded beyond the Z-Degree, we needed to differentiate Low Cost Books classes from classes with no textbook costs. As a result, we added a third course tag, Zero Cost Books (ZCB). In turn, we began classifying Z-Degree classes as ZCB, not LCB. HCC conceives of Z-Degree classes as a subset of the total number of ZCB classes, and we encourage chairs and faculty to continue to use the LCB course tag for courses that required the purchase of some instructional materials and to reserve the ZCB tag for Z-Degree classes or classes where there is no expected charge for instructional materials. LCB and ZCB courses should be tagged with the appropriate cost savings tag whether they are in the Z-Degree or not.

For students, we changed the class search field to indicate the two options. If a student selected the Low Cost Books/Zero Cost Books filter (see fig. 20.7), they would see the classes that had been tagged as either LCB or ZCB (see fig. 20.8).

## Course Attribute

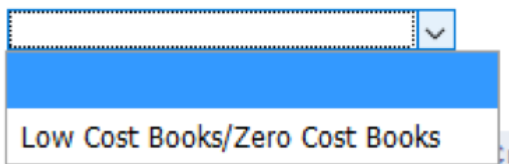


Figure 20.7: Low Cost Books/Zero Cost Books filtered for students under Course Attribute

### Search Results

Houston Community College | Summer 2018

#### My Class Schedule

You are not registered for classes in this term.

#### Shopping Cart

Your shopping cart is empty.

The following classes match your **search criteria** Course Subject: **English**, Course Number is exactly '1301', Course Career: **Semester Credit Hour**, Show Open Classes Only: **Yes**

☒ Open ☐ Closed

NEW SEARCH

MODIFY SEARCH

94 class section(s) found

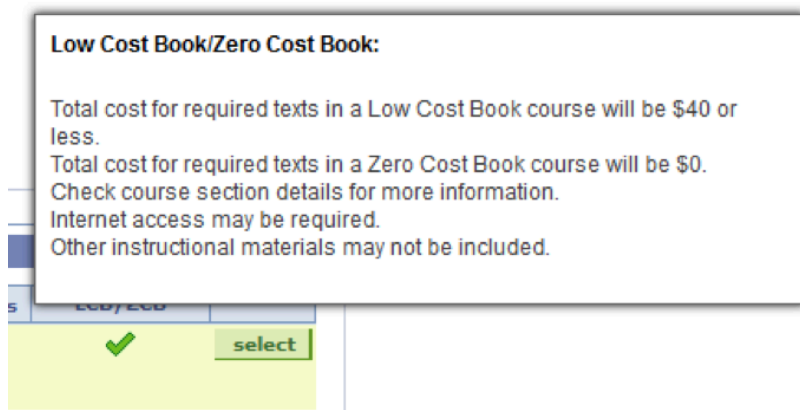
ENGL 1301 - Composition I									
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Class Co-Requisite	Status	LCB/ZCB	
<a href="#">73065</a>	<a href="#">0001-LEC</a> <a href="#">Summer - 1st</a> <a href="#">Five Weeks</a>	MoTuWeThFr 8:00AM - 10:00AM	TBA	Staff	06/04/2018 - 07/08/2018		<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<a href="#">select</a>
<a href="#">72638</a>	<a href="#">0001-LEC</a> <a href="#">Summer - 1st</a> <a href="#">Five Weeks</a>	MoTuWeThFr 8:00AM - 10:00AM	TBA	Staff	06/04/2018 - 07/08/2018		<input type="radio"/>		<a href="#">select</a>
<a href="#">73066</a>	<a href="#">0002-LEC</a> <a href="#">Summer - 1st</a> <a href="#">Five Weeks</a>	MoTuWeThFr 10:00AM - 12:00PM	TBA	Staff	06/04/2018 - 07/08/2018		<input type="radio"/>		<a href="#">select</a>

Figure 20.8: Search result for different English Course available

Somewhat clumsily, we lumped Low Cost Books and Zero Cost Books into the same search (see fig. 20.8) and identified them with the same marker. A green check mark indicated LCB/ZCB courses. If a student hovered their cursor over the green check mark, a description and further instructions would be displayed



(see fig. 20.9). Students had to navigate to the course section details page to differentiate which type of section they were looking at. This solution for messaging to students was not ideal and, fortunately, would change in the next phase of implementation.



*Figure 20.9: Low Cost Book/Zero Cost Book description displays when cursor hovers over the green check mark*

Progress, however, was being made. In the Fall 2018 schedule, faculty and chairs started using the ZCB course tag, alongside the LCB and ZDG course tags.

Fee-based OER courseware platforms complicate the picture for Z-Degree programs. Platforms built around OER content—which may technically be free—are widely used by faculty, but because these platforms charge students a fee, they are classified as LCB, not ZCB courses. For classes using OER courseware platforms in the Z-Degree, HCC has been able to subsidize student access to those classes through a grant fund.

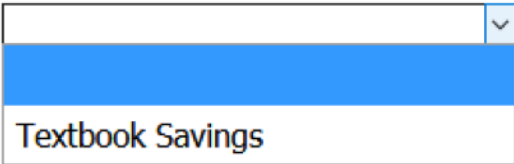
### **Textbook Savings**

In Summer and Fall 2018, HCC worked with the HCC-Barnes & Noble College Bookstore to provide an Inclusive Access option for students (called “First Day” by B&N College), as another option to provide affordable textbooks for students. From a

purely technical perspective, it made sense to use the same procedure that had already been developed for LCB and ZCB tagging to tag courses for this new initiative. However, we also recognized the importance of differentiating Inclusive Access from OER. Whereas, these programs are often associated under the umbrella of “textbook affordability,” there are serious concerns that Inclusive Access, an initiative championed by textbook publishers, does not align with the values and motives behind open education. In particular, the savings offered by publishers are much less than savings provided through the use of OER and other free materials. For example, no Inclusive Access courses currently offered at HCC fit in the Low Cost Books category. Additionally, Inclusive Access materials remain copyrighted and unavailable for remixing, revising, redistributing, or even retaining by students and faculty. Nonetheless, since HCC had already committed to a course tagging process that emphasized cost, including Inclusive Access in the Textbook Savings filter was a natural step.

This new tagging procedure launched at the end of October 2018 for Spring 2019 registration. This implementation enables students to filter searches by Textbook Savings under the Course Attribute filter (see fig. 20.10). The combined Low Cost Books/Zero Cost Books designation has been removed.

**Course Attribute**

A screenshot of a web interface showing a dropdown menu. The label 'Course Attribute' is to the left of the dropdown. The dropdown menu is open, showing a blue bar at the top and the text 'Textbook Savings' below it. A small downward arrow is visible in the top right corner of the dropdown box.

*Figure 20.10: Option to select Textbook Savings under Course Attribute*

As before, a filtered search by Textbook Savings will yield only classes that have been tagged as LCB, ZCB, or Inclusive Access. In the course schedule, under the column labeled Textbook Savings (see fig. 20.11), classes are designated with an orange

letter icon for each savings type: Low Cost (L), Zero Cost (Z), or Inclusive Access (S). Hovering over the icon, students receive a different message balloon depending on the type of class (see figs. 20.12-14).

**Search Results**

Houston Community College | Spring 2019

[My Class Schedule](#)  
You are not registered for classes in this term.

[Shopping Cart](#)  
Your shopping cart is empty.

The following classes match your search criteria Course Subject: **Sociology**, Course Number is exactly **1301**, Course Career: **Semester Credit Hour**, Show Open Classes Only: **Yes**, Course Attribute: **Textbook Savings**

☒ Open
 ☐ Closed

[Return to Add Classes](#)
[NEW SEARCH](#)
[MODIFY SEARCH](#)

5 class section(s) found

* SOCI 1301 - Introduction to Sociology								
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Class Co-Requisite	Status	Textbook Savings
10940	0001-LEC <a href="#">First 8 Weeks</a>	TBA	HCC Online - HCC Online Room	Staff	01/14/2019 - 03/10/2019			<a href="#">select</a>
12291	0001-LEC <a href="#">Regular Term</a>	TBA	HCC Online - HCC Online Room	Staff	01/14/2019 - 05/12/2019			<a href="#">select</a>
10943	0003-LEC <a href="#">First 8 Weeks</a>	TBA	HCC Online - HCC Online Room	Staff	01/14/2019 - 03/10/2019			<a href="#">select</a>
12296	0005-LEC <a href="#">Regular Term</a>	MoWe 9:30AM - 10:50AM	Northline Campus - TBA	Staff	01/14/2019 - 05/12/2019			<a href="#">select</a>
10952	0008-LEC <a href="#">Regular Term</a>	TuTh 12:30PM - 1:50PM	Central Campus - TBA	Staff	01/14/2019 - 05/12/2019			<a href="#">select</a>

Figure 20.11: Search results with various textbook savings options: S (Inclusive Access), L (Low Cost Books), Z (Zero Cost Books)

**Zero Cost Book**

This course is a Zero Cost Books course. The total cost of required instructional materials in this course is \$0.

[select](#)

Figure 20.12: Description for Zero Cost Books (Z) course

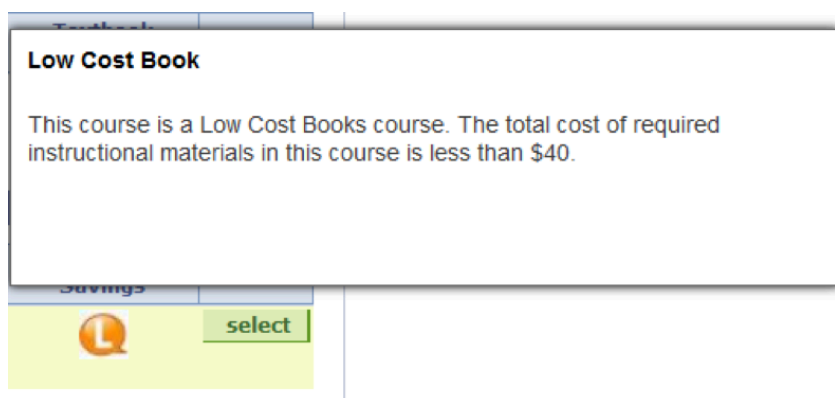


Figure 20.13: Description for Low Cost Books course

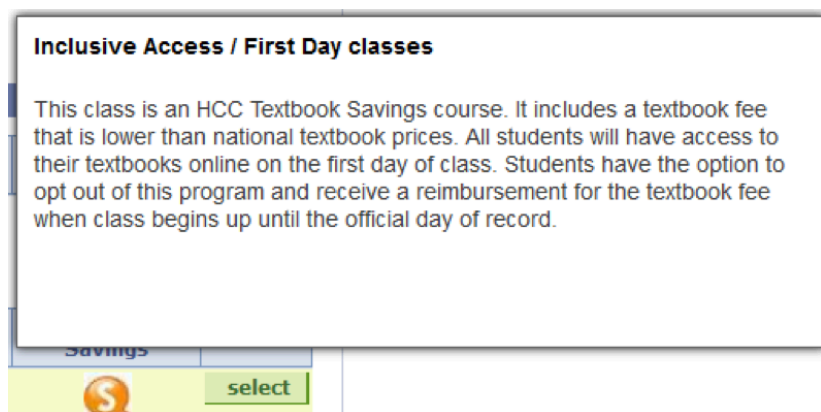


Figure 20.14: Description for S (Inclusive Access) classes

## OUTCOMES

Course tagging has steadily increased as the implementation phases have rolled out because this implementation has coincided with the growth of the overall OER program. Table 21.1 shows the number of sections tagged from inception in Summer 2017 through Fall 2019, with each type of course tag. Note that the total in each column represents the total number of unique sections tagged. Column totals may appear not to add up because Z-Degree sections are tagged with another course tag

(first LCB, then ZCB), so either LCB or ZCB also includes Z-Degree sections.

**Table 20.1. Number of sections tagged**

	Summer 2017	Fall 2017	Spring 2018	Summer 2018	Fall 2018	Spring 2019	Summer 2019	Fall 2019
<b>Z-Degree</b>	n/a	28	52	21	78	98	49	155
<b>Low-Cost Books</b>	49	114	75	2	121	87	2	128
<b>Zero-Cost Books</b>	n/a	n/a	n/a	n/a	117	276	61	250
<b>Total</b>	49	114	75	23	238	363	63	378

Though there is a bit of variability in course tagging, the overall trend indicates an increase in the number of sections tagged as LCB or ZCB. The slight decreases between terms (e.g., from Fall 2017 to Spring 2018) is probably the result of incomplete implementation or natural fluctuations in course offerings (e.g., fewer Composition I courses in the Spring semester) rather than faculty opting out of affordable materials they had previously used. Other metrics indicate that faculty have steadily increased their use of OER and other free resources.

Along those lines, I have noticed a discrepancy between what faculty say about their use of OER in surveys and what is reported in the course tagging. In May 2018, I sent a survey to all full- and part-time faculty ( $N = 2,101$ ), asking about their use of OER. I received a total of 369 responses, of which 75 indicated they teach a course where all required reading materials are OER. Based on the responses to survey questions, I estimate that 25,560 students should have been in classes with entirely OER materials in the 2017/18 academic year. However, according to actual enrollments for courses tagged as either ZCB or Z-Degree

and LCB, only 6,798 students were enrolled in open and affordable courses.

In selected communication with faculty who responded affirmatively to this survey, I discovered that some respondents may have been confused about what OER actually are. Additionally, faculty may have overestimated the number of students enrolled in their courses, thus inflating the survey data. Even accounting for some inflation, a large discrepancy remains between faculty who report using open and free resources and those who have actually tagged their courses as ZCB or LCB. The remainder may be the result of lagging implementation or other variables.

## **NEXT STEPS**

Further improvements focus on internal processes to ensure that we are actually capturing the use of free and reduced-cost resources at HCC. We have developed a counter in PeopleSoft that records every time a student uses the Textbook Savings filter in course searches. As a result, we have information about who is searching for classes using this filter and in which courses they enroll. That information can help us understand whether the message about course tagging is getting out to students and to which students. This information may be helpful for recruitment, course development, and scheduling. With hard data on student searches and selections, we will also be able to test the hypothesis that OER and low-cost course tagging impacts student enrollment, a matter of great interest.

## **RECOMMENDATIONS**

1. Tagging courses as OER, Low Cost, or Zero Cost will likely benefit faculty and the college because students are sensitive to price changes in their textbook preferences. By tagging courses as low cost or zero cost, it may be possible to increase enrollment in those sections.

2. Administrators interested in course tagging ought to design their course tagging system with the students in mind. They should ensure that course tags are visible and intelligible by students. Course tags ought to convey information that is meaningful to students. Additionally, course tagging should be accompanied by a communications plan that provides publicity to the tagging system so that search capabilities and options are widely shared with students.
3. When designing a course tagging system, ensure that you have representation from the right departments in your design committee. You will need input from advising, enrollment, IT, academic leadership, faculty, and students. All these people need to be at the table.
4. Administrators of course tagging processes need to be willing to adapt and update given changes to the program and/or new information about student and faculty behavior.
5. Finally, it is important to have a plan for recording data. You need to know whether the tagging is effective. That means tracking the number of courses tagged and also the usage of the search feature and the enrollment trends in those courses.





## CHAPTER 21.

### KANSAS STATE UNIVERSITY

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REBEL CUMMINGS-SAULS AND BRIAN LINDSHIELD

#### Kansas

**Type of Institution:** Public university

**Impetus:** Faculty-initiated, student-driven mission to support learning

**Student Information System:** KSIS (PeopleSoft)

**Markings Used:** Open/Alt Textbook; O icon

**Unique Features:** Derives funding from the student government association

#### BACKGROUND

In 2019, Kansas State University (K-State) consisted of three campuses, over 20,000 students, and approximately 1,300 faculty/instructors. Deeply rooted in K-State's mission as the first public land grant university, the Kansas State University

Open/Alternative Textbook Initiative was founded in 2013 by three faculty members with a vision of replacing costly commercial textbooks with open or alternative resources to better support student learning (Lashley et al. 2017). To qualify for this initiative, resources must be open (defined by K-State as free, online, immediate, and without permissions restrictions) or alternative. Alternative resources must be free, may or may not be subject to permitted use, and/or be immediately accessible through K-State's learning management system or other student-only access channel. Through this initiative the development or adoption of open or alternative resources may include any of the following or a combination:

- An existing open-access textbook
- Library resources
- High quality open educational resources (OER)
- Multimedia resources found on the open web (e.g., TedTalks, YouTube videos, Wikimedia Commons)
- Faculty-authored materials

This is the first open and alternative textbook project that the authors are aware of with direct financial support of the students. The majority percentage of funding used to launch and support the initiative for the first two years (\$50,000 and \$30,000, respectively) was provided by the student government association (SGA). This funding, and all following funding, has been used to provide awards up to \$5,000 for faculty to replace their commercial textbooks with open or **alternative educational resources**. The initiative's goal is to encourage the adoption and/or development of cost saving texts for students while improving the quality of the learning process. After the initial two years, this initiative gained the attention of faculty senate, central administration, donors, and other universities interested in starting their own programs. The full development

of the Kansas State University Open/Alternative Textbook Initiative has been described previously (Lashley et al. 2017), but one aspect that has not been described is the development of the initiative's icon and implementation of the icon as a **course marking**. This case study will follow the icon design process, implementation aspects, and consistent support by students.

## INTRODUCTION

In late summer 2016, SGA leaders approached Open/Alternative Textbook initiative leaders Andrew Bennett (department head of Mathematics), Rebel Cummings-Sauls (director of the Center for the Advancement of Digital Scholarship), and Brian Lindshield (associate professor of Food, Nutrition, Dietetics, and Health) with the idea of creating an open/alternative textbook icon. A default textbook icon had been used with all sections requiring a traditional textbook in the course schedule and online enrollment system; the students proposed developing an alternative icon to be used in place of the default textbook icon for open/alternative courses. Student and initiative leaders agreed that a separate icon would make it easier for students to differentiate (and enroll in) courses that used an open/alternative resource. At the time, open/alternative courses had no icon at all, and it was common for faculty who used an open/alternative resource to get questions from students about why there was no information about a required textbook. The library and initiative leaders also got questions from students on how to obtain textbooks for these courses. Accurately reflecting the materials for these courses was “not possible,” given the bookstore’s focus on traditional textbooks. These pressures combined to push forward the open/alternative textbook icon creation at K-State.

Students were accustomed to the traditional textbook icon (Lashley et al. 2017), a black image of a book, which was hyperlinked to a campus store page that provided information about required materials for the course (see fig. 21.1). Since

clicking on the icon to find information about the required materials was habitual for students, the new icon would be hyperlinked to a webpage that explained why students did not have to purchase course materials for the course (see fig. 21.2).

## Academics

[Majors and programs](#)
[Academic units](#)
[Catalogs and courses](#)
[Academic support](#)

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### Human Nutrition

If no dates are listed directly under a course, then the course meets Monday, August 25, 2014 through Friday, December 12, 2014.

Jump to course:  [K-State 8 areas](#)

**HN110** Introduction to Public Health

Section	Type	Number	Units	Basis	Days	Hours	Facility	Books	Instructor	K-State 8
ZB	LEG	16954	3				Distances		Wallentine, Kari-D	

This section is closed.  
Global Campus tuition and fees apply to this course. See <http://global.k-state.edu/courses> for individual course costs.

Figure 21.1: Traditional textbook icon in course schedule

During implementation of the icon, the initiative obtained SGA support for a minimal \$10 course fee (see fig. 21.2), which is described on K-State’s “Fee Information” page in more detail. Courses that received and completed K-State’s Open/Alternative Textbook Grant program were automatically approved for inclusion, and these faculty were contacted to approve their participation in the icon program. Courses that were already using open or alternative resources or who converted their courses without the grant could apply for approval and inclusion in the icon program. This required faculty to submit the resource for final review by an initiative leader. The icon is added only to courses that use an initiative-approved, no-cost, open/alternative resource, thus identifying sections eligible for the K-State open/alternative textbook course fee (Lashley et al. 2017).



## Open/Alternative Resource Student Information

[Initiative Home](#)

### For Faculty

[Faculty FAQ](#)  
[Open Textbook Resources](#)  
[Past Grant Recipients](#)

### For Students

[Student FAQ](#)  
[Textbook Affordability Program](#)

### Initiative Grant Application

[Requirements](#)  
[Selection Criteria](#)  
[Application form](#)

### Course Fee

[About the fee](#)  
[Application form](#)

### Contact

[Center for the Advancement of  
 Digital Scholarship](#)  
 K-State Libraries  
 1117 Mid-Campus Drive North  
 Manhattan Kansas, 66506  
[cads@k-state.edu](mailto:cads@k-state.edu)

### What is this?

Students pay a \$10 fee to take a course that has no-cost educational resources rather than paying for an expensive commercial textbook. The fee helps to support the creation and use of an instructor-created textbook or resources for a class.



### Why do I care?

Instead of paying \$100 or more for a textbook, students will pay \$10 to support the creation of a no-cost textbook tailored to the class by the instructor.

### Where do I find my Open/Alternative Resource?

Depending on the type of resource(s) being used, the textbook or resources may be directly embedded into K-State Online or linked out to an external website. If you have any questions about your open/alternative resource, please contact your instructor.

### Does my class include an Open/Alternative Textbook resource?

Look for the open/alternative textbook icon (above) in the [course online schedule](#) or when enrolling for courses in [KSIS](#).

### How will this impact my student fees?

The university is including a \$10 fee per student for courses using approved open/alternative resources. For approved courses, the fee will be divided between the supporting department (90%) and the initiative (10%). The fee encourages faculty to create and provide a quality and affordable alternative to a textbook, while providing stable funding so the Initiative can support faculty in the implementation process.



Figure 21.2: Webpage for open/alternative resource student information at Kansas State University

## DESIGN

A committee of initiative leaders and implementing partners, led by SGA, was formed to tackle design. The implementing partners included a representative overseeing K-State's student information system, KSIS (PeopleSoft), the director of web services, a representative from the registrar's office, and a number of representatives from the information systems office. Wanting to draw inspiration from existing open-access textbook icons, the committee perused existing options. The group liked the College Open Textbooks icon because it simultaneously gives students the familiar perception of a book while suggesting alternative material types (see fig. 21.3). The icon could be

adapted with a slight modification, changing the blue to purple to fit institutional colors. The initiative negotiated with College Open Textbooks and signed a license agreement to use this modified icon at no cost.



*Figure 21.3: College Open Textbooks icon*

When this design went to the icon development partners in communication and marketing, however, it came under some scrutiny. The department indicated that the icon might not display properly at a reduced size, and the creative director ultimately decided against the design.

Campus implementing partners suggested taking the black default book icon and making it purple. Committee members shared a concern that this simple modification fell short of its mission and would not be striking or different enough for most students to identify the change. A purple padlock design, inspired by the open-access icon, was suggested. However, other implementing partners found its meaning unclear. At this point, implementation partners moved forward on the icon's design without involving the committee in its development or selection. The proposed design featured a bold white O on the new textbook icon, a stylized black image of a book, which was being implemented around the same time. While this design was more promising than just a purple book, the committee pushed to have another creative round of design.

Two designs were developed with a graphic artist, exploring

creative options around the acronym for open/alternative resources—OAR (see fig. 21.4). The committee was split on which design they liked best. However, feedback from the implementing partners and others on campus consistently indicated that they did not understand what the icons represented.



*Figure 21.4: Creative OAR icon designs that were ultimately rejected*

The committee returned to the O icon and requested that the designers make the book purple (see fig. 21.5). This final design aligned with K-State pride and was differentiated from the regular textbook icon, fulfilling the original function desired when the committee began the development process. Most important, the initiative was growing on campus and all parties agreed that it met their critical requirements. The design was approved by all stakeholders. This included the SGA, though students did not participate in testing or providing feedback on the icon.



*Figure 21.5: Final O icon design for indicating Open/Alt Textbook course*

## IMPLEMENTATION

Initiative partners asked SGA representatives about their preference for where to include the open/alternative textbook course icon and link in the course schedule. SGA indicated that they would like it as its own bullet point below the Course Schedule Information title and text. This provided a prominent location for students to identify this new icon. Following this recommendation, along with implementation partners additional setup suggestions, allowed the implementing team to provide a one-click listing of all open/alternative courses. Figure 21.6 shows what this page looks like now, including the open/alternative course listing link with the new icon. Figure 21.7 shows the list of approved open/alternative textbook courses. Students can now use this sorted list to quickly identify and select courses that use only open/alternative resources.



## Academics

Academics home

Faculty

Diversity

Course Schedule

Course schedule information

Course lists by college and department


Agriculture

Architecture, Planning & Design

Arts and Sciences

Fall 2018 course schedule information includes admissions, enrollment, enrollment time chart, non-standard drop and refund dates, final exam schedule, and more.

Course lists by college and department

Courses with open or alternative textbooks are labeled with the open textbook icon, . View the list of [courses with open textbooks](#).

Closed courses are greyed out. View the current list of [closed courses by class number](#).

Agriculture

- General Agriculture
- [Agricultural Economics](#)
- Agronomy
- Animal Sciences and Industry
- Communications and Agricultural Education
- Entomology
- Food Science Institute
- Grain Science and Industry
- Horticulture and Natural Resources
- [Plant Pathology](#)

Architecture, Planning & Design

- Environmental Design Studies
- Architecture
- Interior Architecture and Product Design
- [Landscape Architecture/Regional and Community Planning](#)

Arts and Sciences

- College of Arts and Sciences
- Aerospace Studies
- American Ethnic Studies
- Art
- Biochemistry and Molecular Biophysics
- Biology
- Chemistry
- Communication Studies
- Economics
- English
- Gender, Women and Sexuality Studies
- Geography
- Geology
- History

Figure 21.6: Kansas State University course schedule webpage from Fall 2018 with new O icon and open/alternative course list link


## Academics

[Majors and programs](#)
[Academic units](#)
[Catalogs and courses](#)
[Academic support](#)



### Open textbook courses

If no dates are listed directly under a course, then the course meets Monday, August 20, 2018 through Friday, December 7, 2018.

Jump to course:




K-State 8 areas 

#### AERO099 Aerospace Studies

Section	Type	Number	Units	Basis	Days	Hours	Facility	Books	Instructor	K-State 8
A	LAB	10041	0	CNC	U	4:00 - 6:00 p.m.	DUR 1073		Caywood, Brad William	None
B	LAB	16135	0	CNC	Appointment				Caywood, Brad William	None

AERO 099, Section B: Condensed 100-200 level requirements for 2 year cadets.  
Enrollment restrictions: Department consent

#### AERO110 Aerospace Studies 1a

Section	Type	Number	Units	Basis	Days	Hours	Facility	Books	Instructor	K-State 8
A	REC	10042	1		U	9:30 - 10:20 a.m.	MS 209		Caywood, Brad William	None
B	REC	12982	1		T	2:30 - 3:20 p.m.	MS 209		Caywood, Brad William	None
C	REC	14714	1		U	10:30 - 11:20 a.m.	MS 209		Caywood, Brad William	None

Enrollment restrictions: Instructor consent

Figure 21.7: O icons identifying approved open textbook courses on filtered Fall 2018 Kansas State University course schedule list

Figure 21.8 shows what the icon looks like in PeopleSoft, where students elect courses in which they want to enroll. This was accomplished utilizing the delivered class attribute functionality to apply an “Open Textbook” attribute to the appropriate class sections. Implementation partners and staff made a modification to the Class Search feature to display the new icon for those class sections denoted with the attribute. Having the icon in all locations that students use to choose courses allows for unified, increased recognition.







<div> <span>● Reserved</span> <span>● Open</span> <span>■ Closed</span> <span>▲ Wait List</span> </div> <div> <div>New Search</div> <div>Modify Search</div> </div>											
4 class section(s) found											
~ FNDR 352 - Personal Wellness											
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Status	Textbook	Open/Alt Textbook	Natural and Physical Sciences	General Education	Additional Fees
17954	ZALEC Regular	Online	Distance Education	Erika Bono Lindshield	01/22/2019 - 05/10/2019	●					\$5
~ FNDR 400 - Human Nutrition											
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Status	Textbook	Open/Alt Textbook	Empirical and Quantitative Reasoning	Natural and Physical Sciences	Additional Fees
11510	ZALEC Regular	MoWeFr 10:30AM - 11:20AM	Justin 183	Brian Lee Lindshield	01/22/2019 - 05/10/2019	●					
Class	Section	Days & Times	Room	Instructor	Meeting Dates	Status	Textbook	Open/Alt Textbook	Empirical and Quantitative Reasoning	Natural and Physical Sciences	Additional Fees
17489	ZALEC Regular	Online	Distance Education	Brian Lee Lindshield	01/22/2019 - 05/10/2019	●					\$5

Figure 21.8: KSIS PeopleSoft student enrollment center showing O icon

Federal and university deadlines require textbook reporting of the approved list of courses must be completed almost a semester in advance, regardless of whether open and alternative resources are used, though this timing can vary depending on local environment. Each semester the initiative leaders create a list of approved courses that will receive the open/alternative icon designation the following semester. Initially, to ease the burden on the university registrar's office, initiative leaders were going to code the courses within the enrollment system, and one partner was fully trained to code courses. After one semester, however, it was clear that frequent updates to the system and process strained initiative leaders' ability to keep the coding up to date; the one partner who completed full training was not able to complete the first-round entries because of workflow and display changes in the system. Implementation partners in the registrar's office agreed to take on this responsibility each semester. Therefore, the success and sustainability of this icon program requires their ongoing participation.

The O icon has been instrumental in increasingly identifying open/alternative courses over several years. For example, figure 21.9 describes the number of courses that have utilized the icon from Fall 2016 to Summer 2019. It is important to note that a majority of the courses are simply only available in the fall semester.

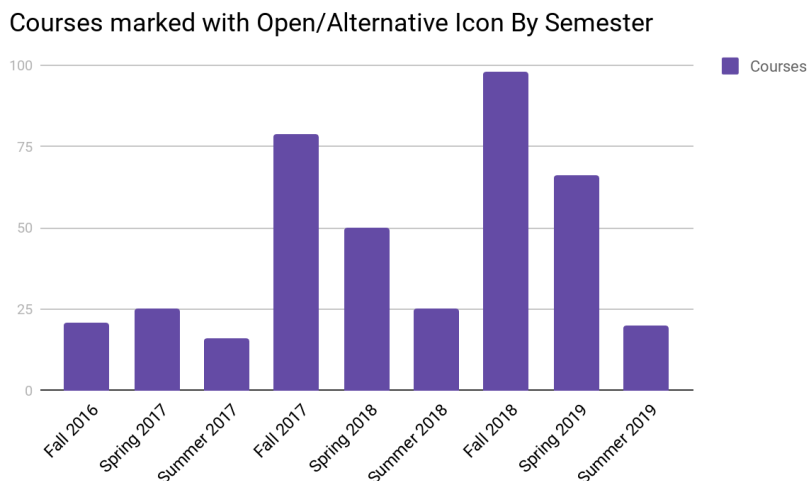


Figure 21.9: Number of Kansas State University courses with an open/alternative icon by semester

## COMMUNICATION CAMPAIGN

After implementing the O icon, K-State used several channels to communicate this information to campus. In addition to the integrations mentioned above, initiative leaders provided

- University information technology KSIS announcement on the Open/Alternative Icon (fig. 21.10)
- Presentation to all deans and department heads, October 2016
- Information sessions for faculty, every semester
- University communication through “K-State Today,” a University email brief sent to all students, staff, and faculty daily. To drive student engagement, a student-focused version of “K-State Today” pulls in articles written specifically for the student population.
  - Introduction to the new student fee” (sent to all faculty, staff, and students; see fig. 21.11)

- Awareness promotion encouraging students to look for courses with the O icon (sent through student focused version of “K-State Today”; see fig. 21.12)

The screenshot shows the KSIS (Kansas State Information System) website. At the top is the Kansas State University header with a search bar and navigation links. Below the header is a banner image showing students in a classroom. The main content area features a section titled "Open/Alternative Textbook Icon" with a detailed announcement. To the left is a sidebar with navigation links, and to the right are sections for "KSIS Tips" and "Calendars".

**KANSAS STATE UNIVERSITY**

Search web, people, directories  
Browse A-Z Sign in ▼

K State home: » KSIS » News & Updates » Open/Alternative Textbook Icon

**KSIS**

**Home**  
**Contact Us**  
**Getting Started**  
**Help**  
for Advisors  
for Designees  
for Faculty  
for Staff  
for Students  
**Sign in to KSIS**  
**Training**  
**IT Help Desk**  
Kansas State University  
K-State Student Union  
Cat's Pause Lounge  
Room 222  
Manhattan, KS 66506  
[785-532-7722](tel:785-532-7722)  
[800-865-6143](tel:800-865-6143)  
[helpdesk@ksu.edu](mailto:helpdesk@ksu.edu)

**Open/Alternative Textbook Icon**

The high cost of commercial print textbooks is a major concern for both students and their parents. The goal of the **Open Textbook Initiative** is to encourage faculty experimentation and innovation to adopt and/or develop texts that provide cost savings for students while improving the quality of the learning process.

To increase the visibility of classes with an open/alternative textbook, effective September 15th a new open/alternative textbook icon is displayed in KSIS class search results and class details pages. Users can also search for all classes with an open/alternative textbook.

For more information see:

- Official announcement in K-State Today
- Open/Alternative Textbook website
- Step-by-step Instructions

**KSIS Tips**

- Disable Pop-Up Blockers
- Navigation Tips for Faculty/Staff
- Navigation Tips for Students
- Print from KSIS
- Web Browser Requirements

**Calendars**

- KSU Academic Calendar
- Registrar's Calendar

Figure 21.10: Information announcement on the open/alternative textbook icon for the KSIS, class search



KANSAS STATE

UNIVERSITY

Search web, people, directories

Browse A-Z

Sign in ▾

K-State home

» Office of the Vice President for Student Life

» K-State Today Student Edition

» Want to save money? Look for spring courses with the Open/Alternative Textbook icon...

K-State Today Student Edition

Current Issue

Archive

Contribute

Guidelines

October 17, 2016

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Other publications

Kansas State Polytechnic's Wildcat Weekly

K-State Olathe newsletter

Global Campus' WorldWide Wildcats

K-State Research and Extension newsletter

Other resources

One Stop Shop for Student Success

Job opportunities

Wildcat Watch

Want to save money? Look for spring courses with the Open/Alternative Textbook icon


By Sarah McGreer Hoyt

Have you heard about courses on campus that use open/alternative textbooks?

Open/alternative textbooks, which are free or low-cost, take the place of traditional course materials, including expensive textbooks. If you are interested in enrolling in these courses for the spring 2017 semester, look for the open/alternative textbook icon.

You also can view a listing of all courses that will use open/alternative textbooks.

Read more about Kansas State University's Open/Alternative Textbook Initiative.



In this issue

Events

KNEA-SP hosting fundraiser at Fuzzy's Taco Shop

The Library and Your Research: Web of Science and PubMed: What you don't know (or need a refresher about)

Leonardo Art Science Evening Rendezvous Oct. 20

Anthropology Club hosting book sale Oct. 17-21 and Oct. 24-28

News and research

Want to save money? Look for spring courses with the Open/Alternative Textbook icon

Debating the debates: Research project studies civility in presidential election

Building name recommendations survey

Figure 21.12: “K-State Today Student Edition” article introducing the O icon and encouraging students to look for open and alternative courses

## CONCLUSION

Local resources, including student support, were used throughout the design and implementation of the open/alternative textbook icon at K-State. While support was obtained from a multitude of areas at the university, no additional funds were dedicated for the development and implementation of the O icon. Like many things in the history of the K-State Open/Alternative Textbook Initiative, this icon started with the students. They came to the initiative with the idea, actively participated in the design process, and gave critical feedback for implementation.

The open/alternative icon has served the university well and initiative leaders have grown to appreciate its simplicity. The icon’s purple color and white O distinguishes it from the traditional book icon, which K-State feels accomplishes the goal

KANSAS STATE UNIVERSITY 287

of clear identification and recognition of open/alternative courses.

A formal assessment mechanism was not a component of the initiative's implementation, but developing one is a future goal. Informally, student feedback confirms that a vast majority of the students are aware of the icon and that they have taken at least one course with an open alternative textbook.

## **RECOMMENDATIONS**

From the experience at K-State the authors have the following recommendations.

1. Keep it simple. If the focus had been on a simple, effective icon from the beginning it would have saved institutional time and resources. Though stakeholders hoped for a more creatively designed icon that would excite everyone, the process of arriving at an acceptable choice is what took the most amount of time. Trying to get the "right" design delayed implementation and deprived students of the icon's benefit. Yet it was important that the icon stand out from its traditional counterpart and draw students' attention to the availability of open and alternative resource courses.
2. Student perspective and enthusiasm is critical. Students came up with the idea, led the process initiative initially, and were strong advocates for inclusion in institutional systems, including providing key insight on how it should be done.
3. Be persistent. While students were instrumental in getting the idea started, and initially led the effort, initiative leaders did have to take the lead to finish implementation, working with the necessary partners when student focus waned due to course demands, SGA responsibilities, and



life matters. There were times when it felt like the project lacked a way forward, but the collective belief in what we were doing allowed us to persist through implementation.

4. Involve all implementing partners throughout the process, ideally meeting together. Initiative leaders were fortunate to work with a willing implementing team. Icon development partners in the division of communication and marketing, however, worked with initiative leaders primarily over email. This meant that ideas were discussed among the implementing team and then passed along to the icon development partners. If the full team had been able to meet together, several efficiencies would have been created.



## CHAPTER 22.

### KWANTLEN POLYTECHNIC UNIVERSITY

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RAJIV JHANGIANI

#### British Columbia (Canada)

**Type of Institution:** Public university

**Impetus:** Transparency and promotion of zero textbook cost (ZTC) courses

**Student Information System:** Banner (Ellucian)

**Markings Used:** ZTC (attribute); "This course section has ZERO TEXTBOOK COSTS."

**Unique Features:** Professional marketing materials, multiple ZTC programs (Z-Degrees)

#### BACKGROUND

Kwantlen Polytechnic University (KPU) is a public post-secondary institution in British Columbia with a student population of approximately 20,000. We are Canada's leading

institutional adopter of **open educational resources** (OER), and we now also actively support the adaptation and creation of open textbooks through OER grants and OPUS, our Open Publishing Suite. In November 2017, KPU launched Canada's first Zed Cred program (sometimes referred to as a **Z-Degree** in the United States) wherein the Zed refers to zero required textbook costs and Cred refers to a credential. Relying on a pragmatic combination of courses that assign OER, library resources, or instructor-created materials, and courses that require no resources at all, students were able to earn the Certificate in Arts credential without spending one dollar on textbooks. We selected the Certificate of Arts because of its flexibility, which offered students a lot of choice when selecting courses (only 2 out of the 10 are prescribed) and provided a faster path to KPU offering a Zed Cred.

Although the Spring 2018 semester was the first for the Zed Cred, students were still unable to easily identify Zed Cred courses at the time of registration. The promotional mechanism we used at the time involved publishing a webpage that listed all of the Zed Cred sections. This strategy was never intended to serve as a long-term solution, not least because few students were aware of the existence of the page. Fortunately, our registrar's office was willing and able to add the following note below each of the section listings in the course timetable (schedule): "This course section has ZERO TEXTBOOK COSTS and is part of the Zed Cred program. For information about programs that you can complete with zero required textbook costs, visit ZedCred" (see fig. 22.1). However, students who were unaware of the existence of the Zed Cred webpage would have had no way of searching for course sections that had zero required textbook costs, a state of affairs that led us to investigate how we might integrate a **course marking** convention.

<input type="checkbox"/>	ENGL 1100.L17	33796	Introduction to University Writing	3	Langley	Lecture	Open	25	Betty Anne Buirs
<ul style="list-style-type: none"> <li>• Class : Sep 04, 2018 to Dec 03, 2018 — Thu @ 13:00 - 15:50 in room Langley, East 2590</li> <li>• Final exam : Dec 13, 2018 to Dec 13, 2018 — Thu @ 12:00 - 15:00 in room Langley, East 2590</li> </ul> <p><b>More Info:</b> This course section has ZERO TEXTBOOK COSTS. For information about programs that you can complete with zero required textbook costs, visit <a href="#">ZedCred</a>.</p>									
<input type="checkbox"/>	ENGL 1100.S11	33820	Introduction to University Writing	3	Surrey	Lecture	Open	25	Gillian Dearie
<ul style="list-style-type: none"> <li>• Class : Sep 04, 2018 to Dec 03, 2018 — Mon @ 10:00 - 12:50 in room Surrey, Cedar 2005</li> <li>• Final exam : Dec 10, 2018 to Dec 10, 2018 — Mon @ 08:30 - 11:30 in room</li> </ul> <p><b>More Info:</b> This course section has ZERO TEXTBOOK COSTS. For information about programs that you can complete with zero required textbook costs, visit <a href="#">ZedCred</a>.</p>									
<input type="checkbox"/>	ENGL 1100.S13	33867	Introduction to University Writing	3	Surrey	Lecture	Open	25	Gillian Dearie
<ul style="list-style-type: none"> <li>• Class : Sep 04, 2018 to Dec 03, 2018 — Mon @ 16:00 - 18:50 in room Surrey, Fir 322</li> <li>• Final exam : Dec 10, 2018 to Dec 10, 2018 — Mon @ 15:30 - 18:30 in room Surrey, Fir 322</li> </ul> <p><b>More Info:</b> This course section has ZERO TEXTBOOK COSTS. For information about programs that you can complete with zero required textbook costs, visit <a href="#">ZedCred</a>.</p>									
<input type="checkbox"/>	ENGL 1100.S16	33807	Introduction to University Writing	3	Surrey	Lecture	Open	25	Paul Tyndall
<ul style="list-style-type: none"> <li>• Class : Sep 04, 2018 to Dec 03, 2018 — Tue @ 10:00 - 12:50 in room Surrey, Fir 322</li> <li>• Final exam : Dec 11, 2018 to Dec 11, 2018 — Tue @ 08:30 - 11:30 in room Surrey, Fir 322</li> </ul> <p><b>More Info:</b> This course section has ZERO TEXTBOOK COSTS. For information about programs that you can complete with zero required textbook costs, visit <a href="#">ZedCred</a>.</p>									

Figure 22.1: Screenshot of Zed Cred section listings with a descriptive note

## STEP 1: RESEARCH

As the institutional lead for our open education initiatives, I was aware that other institutions had managed to find ways to integrate open and affordable materials designations in their course schedules. I was also aware that the director of institutional relations at OpenStax had created a survey (Finkbeiner n.d.) and spreadsheet (Finkbeiner 2019) to facilitate the collection and sharing of this knowledge and had invited representatives of institutions that had adopted this practice to share their names, contact information, specific course timetabling software, and details about their approach. Equipped with this information, I reached out to the listed representatives of Northern Essex Community College, Alamo Colleges, Montgomery College, and Umpqua Community College. I selected these institutions because they all use the same course timetabling software as KPU (Banner) and also indicated a willingness to share their method of designating courses. Thanks to the details provided by the director of library and tutoring services from Umpqua Community College, the course scheduling team in the office of the registrar was able to determine that we could use the Course Attribute field within

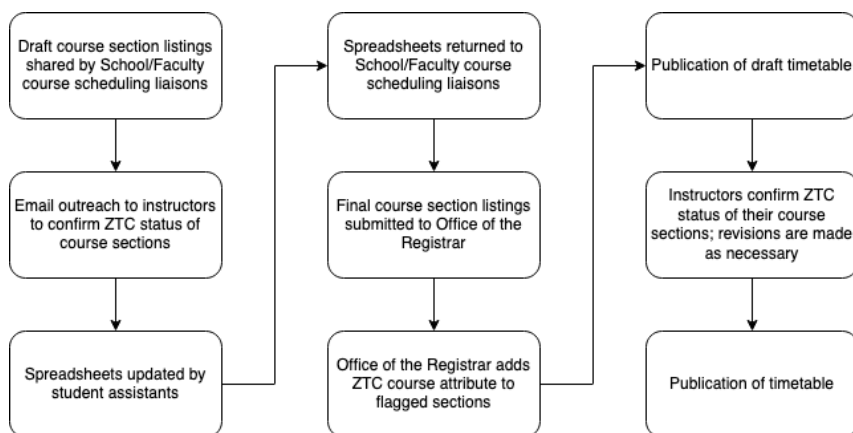
Banner to create a designation for course sections that qualify for the Zed Cred program.

## STEP 2: TESTING

To test the Umpqua approach, I met with two members of the Registrar's course scheduling team and two staff members from the Faculty of Arts (which houses the Certificate in Arts) in February 2018. The plan was to attempt to integrate the course attribute, using a draft timetable as a sandbox. Although some questions and concerns were initially raised (e.g., relating to KPU's customization of Banner and whether the integration of the Zed Cred course attribute would require hiring a contractor with coding skills), we were pleasantly surprised to find that setting up a new course attribute was simpler than expected. Interestingly, this realization also triggered a plan to create additional course attribute designations to enable the listing of all course sections from a specific school/faculty (not a feature that had been previously provided).

Following some additional testing, the course scheduling team (led by the associate registrar, from registration records and systems) agreed that the new field could be launched in time for the third semester of the Zed Cred program (Fall 2018). This also meant that procedures needed to be developed and staff oriented to enable an accurate and smooth reporting of Zed Cred sections from the various departments and faculties to the course scheduling team ahead of the Fall 2018 semester reporting deadlines. The procedure piloted involved direct outreach by email to instructors to determine whether their course sections qualified for inclusion in the Zed Cred. (The emails included a clear operational definition of Zed Cred status.) Based on the responses to these emails, student assistants updated spreadsheets containing each school/faculty's course section listings along with a column to denote a course section's Zed Cred status. These spreadsheets were then shared with each

school/faculty's course scheduling liaison, who submitted the confirmed Zed Cred listings to the Office of the Registrar. There, the scheduling team ensured the relevant course attribute was added to Zed Cred qualifying sections. Faculty were given the opportunity to review their section's Zed Cred status for accuracy when the draft timetable was published and prior to the public release of the course timetable (see fig. 22.2).



*Figure 22.2: Flow chart summarizing the procedure for collecting and verifying information about the zero textbook cost (ZTC) status of course sections*

### STEP 3: LAUNCH

The Zed Cred course attribute field was added into the timetable in May 2018, two months prior to the publication of the course schedule for the Fall 2018 semester. For the first time, students at KPU were able to filter their course selections on the basis of textbook costs. The nature of the course marking (Zed Cred instead of OER) mirrored our focus on the student experience of **zero textbook costs (ZTC)**, no matter the path to get there. Although the separate webpage with a complete listing of Zed Cred course sections was maintained through to the Fall 2018 semester, we decided to discontinue this practice to avoid both duplication and potential errors (of commission and omission).

Announcements about the new course marking were

broadcasted through a variety of channels, including Student Services, Student Orientations, and the Future Students Office (see fig. 22.3). A screen recording that showed how students could use this new feature was embedded on the Zed Cred webpage and shared on social media to further raise awareness. Finally, a professional marketing video was filmed to promote the Zed Cred, with a preview of the Zed Cred course attribute feature included.



*Figure 22.3: Twitter post promoting Zero Textbook Cost search feature at Kwantlen Polytechnic University*



## POSTSCRIPT

The ability to provide a course marking system that students can use to search for and filter Zed Cred courses has been a game changer. Students to whom it matters the most are finally able to identify and register in course sections that have zero required textbook costs. What is more, we are already seeing the positive impact of this feature on student demand for Zed Cred sections (as compared with non-Zed Cred equivalent courses), as demonstrated by the size of section wait-lists. The addition of the course attribute has also made it far easier to evaluate the impact of the Zed Cred initiative as course distribution and enrollment data can now be filtered according to this new field. This has, for example, allowed us to generate reports each semester that compare courses that have both participating and non-participating sections on metrics such as grade distributions, and course withdrawal and failure rates. Awareness of our Zed Cred program (now rebranded as a Zero Textbook Cost, or ZTC, initiative) has continued to grow, with dozens of new faculty members joining the initiative each semester. At the time of writing, students at KPU are able to choose from over 700 courses that are participating in the ZTC initiative, and earn one of seven ZTC credentials, including the Bachelor of Arts Degree in General Studies, Associate of Arts Degrees in General Studies or Sociology, a Diploma in General Studies, and a Certificate in Foundations in Design. By the end of its first two years, the ZTC program has saved students at KPU over \$3.1 million. Of course, none of this would have been possible without the care and generosity of practitioners within the OER movement and the support of key stakeholders at KPU, especially the course scheduling team, the registrar, Faculty of Arts staff, and departmental administrative assistants.

## RECOMMENDATIONS

1. Provide a clear operational definition of what you mean

by ZTC status when reaching out to faculty. For example, this is ours at KPU:

ZTC designation criteria: In order to qualify for the Zero Textbook Cost (ZTC) designation, sections must have zero required textbook costs, whether this is achieved through the use of open educational resources, library resources, instructor-created materials, and/or other free resources (or even no required resources). Sections may be listed as ZTC if a commercial textbook is optional or if students have the option to purchase a print copy of an open textbook (as long as this is not required). Studio fees and equipment/supplies such as calculators/art supplies do not impact ZTC designation.

2. Aim to integrate OER or ZTC course markings with existing procedures. For example, at KPU the Faculty or department liaisons already followed a practice of submitting course section listings to the Office of the Registrar via a spreadsheet. We simply added a column to this spreadsheet to denote ZTC status.
3. Build on your initial data collection work. By far, the most time intensive work involves gathering and confirming information about the ZTC status of each course section. To make this more efficient, the open education team maintains an updated database of instructor/course combinations that have previously participated in the ZTC initiative. In the semesters that have followed the launch of our ZTC course marking initiative, we have been able to draw on this by pre-populating the Zed Cred column in the spreadsheets so that those instructors can simply confirm their continued participation in the ZTC initiative when they view the draft timetable.
4. Take advantage of the course attribute field to conduct and publish regular research reports to document the impact of the ZTC course marking initiative on educational outcomes.

5. Collect testimonials from students who have benefited from the course marking. We are now frequently approached by students (e.g., at student orientation, open houses, and other events) who inform us that they rely on the ZTC filter in the course timetable when they are selecting courses. These stories and testimonials are important to collect as they help to disabuse those members of the academic community who continue to believe that the high cost of required course materials is not a significant problem.



## CHAPTER 23.

### LOWER COLUMBIA COLLEGE

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ANDREA GILLASPY STEINHILPER

#### Washington

**Type of Institution:** Community and technical college

**Impetus:** Student retention and equity; Washington House Bill 1375

**Student Information System:** A legacy system, origin unknown

**Markings Used:** OER and Low Cost Materials

**Unique Features:** Open and alternative courses are designated in printed class schedule.

#### BACKGROUND

Lower Columbia College (LCC) is a small two-year community college in Longview, Washington, with Fall 2018 enrollment of approximately 3,000 full-time equivalent students. Originally, Longview was a logging town, and for the last 30 years our region of southwest Washington State has been economically

disadvantaged. The area is fairly rural, located partway between Portland and Seattle, and has no other post-secondary institutions within 45 miles. To assist our community, our strategic plan includes student access, support, and completion. Anecdotally, we have found that the cost of textbooks are a barrier to student access and completion; as a result, the use of **open educational resources (OER)** and reducing the cost of textbooks has provided important support to the mission of our college.

## HISTORY OF OER AT LOWER COLUMBIA COLLEGE

Some LCC faculty began using open educational resources for their own individual courses in the early 2010s. In 2014, LCC participated in the Librarians as Open Educational Leaders initiative from the Washington State Board for Community and Technical Colleges (SBCTC) and the Washington State Library (Librarians as Open Education Leaders 2015). Through this program, LCC received a start up grant of \$2,500, which funded the development of our OER Action Plan as well as faculty stipends for implementing two OER classes (English 101 and Psychology 101). The Action Plan, a requirement of the initial grant, suggested identifying needs, resources, and partners. We talked with many OER players across campus, including administrators, counseling, student groups, and faculty. Administrators asked us to talk with the bookstore and print shop. Counseling suggested working with the Foundation. All this helped build a core group of supporters of OER. By June 2015, the team evolved into an OER advisory group involving the bookstore, print shop, faculty, and the library. The ongoing advisory group continues to help us communicate OER needs across campus.

## INTRODUCING COURSE MARKINGS

When the LCC Library began working with OER in 2014/15, we

did not consider identifying or marking which classes used OER in the **course catalog**. However, as the movement on our campus grew, with more instructor participation, more classes, and more students interested in inexpensive textbooks, identifying OER classes became increasingly important. The advising and student success offices had been purchasing textbooks because many students could not afford to buy their own. This OER movement would be able to help everyone with the cost of materials and improve student equity on campus—but only if advisers and students knew which courses used OER.

## CREATION OF FLYER PROMOTING OER COURSES

Our first step in promoting OER on campus was to develop a flyer identifying the courses that used OER as primary course material. The bookstore manager, an active player in our advisory group, knew what textbooks faculty used and the costs of all the texts. In addition, when faculty wanted alternative materials, he sent them to our part-time OER librarian. Thus, the librarian and the bookstore manager knew which classes used OER and low-cost materials. With that information, we developed a flyer identifying all our OER classes. The first quarter that we implemented the flyer (Fall 2015) our list of classes using OER was small—about 40 sections, primarily in Psychology and Biology. OER adoption did grow, particularly when our business faculty signed on to use OER. To demonstrate the potential impact of OER, our librarian developed a survey asking students whether they found the OER texts as useful as traditional materials and whether they would choose them again. The bookstore manager kept track of all the money students spent—or saved—by using OER. The library director and the bookstore manager worked together to remind the college president how much money OER saves students, even putting advertisements on readerboards on campus about OER savings (see fig. 23.1). With all this advertising to students, faculty, and

administration, OER were eventually identified on the college's annual priorities.

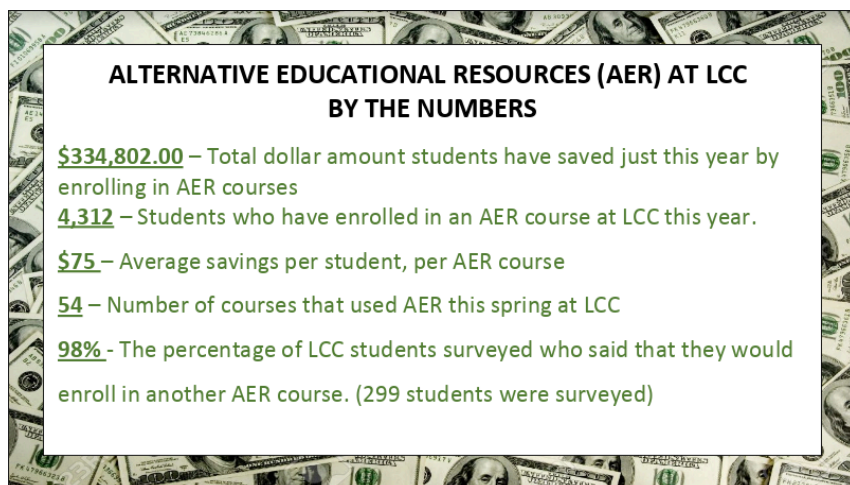


Figure 23.1: Readerboard advertisement of alternative educational resources from Spring 2016

## REBRANDING THE ALTERNATIVE EDUCATIONAL RESOURCES INITIATIVE

In 2015/16, some members of our advisory group thought we needed to clarify how we identify our inexpensive course materials marketed on the flier because

1. not all the materials were free, especially if students purchased them in the bookstore;
2. not all of them were open—for example, some instructors used ebooks available through the library databases; and
3. some of the items were neither free nor open as instructors simply used very inexpensive books.

Yet all of these materials were still included. The SBCTC only defined OER, and we could not find other schools that included these alternative materials with their OER. No other schools talked about printing the OER and selling them at the bookstore,



but our faculty and students appreciated having print, as opposed to online, textbooks. Worrying about copyright, fair use, and the definition of “open,” members of the advisory group discussed whether we should use a different designation for our materials. In 2016 we came up with our own definition of “**alternative educational resources**,” or AER, and started using this designation in talking about our inexpensive course materials for students. Whether the item was commercial or based on OER, printed or available only online, as long as the cost to the student for required course materials was \$30 or less, we considered it AER. In the class schedule ad (and flyer), AER is explained as follows:

LCC calls these resources Alternative Educational Resources (AER), and they include all course resources that cost students less than \$30 to use. Some AER courses may include resources that are not openly licensed but still reduce costs for students, such as used or inexpensive books, library resources, and other alternatives to costly commercial textbooks. (Lower Columbia College 2018)

## **MARKING ALTERNATIVE EDUCATIONAL RESOURCES IN THE CLASS SCHEDULE**

The small size of LCC means that most staff have diverse responsibilities. Fortunately, from 2015-2017, the person in charge of building the class schedule was also the library’s administrative assistant, who became an important partner in implementing alternative resource designations. Until she got involved, all advertising of AER classes was by word of mouth or by the flyers we created. Beginning Fall 2016, this administrative assistant found a place to put the information in the class schedule. There was a tag in our class schedule that had not been used, and she filled that spot with an icon she developed—an e in a circle. She added this icon to the key of course identifiers (see fig. 23.2).

© = Course uses Open or Alternative Educational Resources/Textbooks cost less than \$30.00

Figure 23.2: Icon and description of alternative educational resources from key in class schedule

She tagged each AER course with the icon. Students selecting a course with the icon knew it would have very inexpensive (or free) materials. All we needed to do was identify every class that used AER.

This led to the creation of our course marking procedure. Once the class schedule is drafted, the administrative assistant responsible for creating the class schedule sends the OER librarian the list of all classes and sections for a given quarter. The OER librarian keeps a master list of all instructors and courses that use AER. Each section using AER is tagged, and the OER librarian sends a draft list to all faculty. Faculty then confirm that these sections, and only these sections, are indeed using AER. The list is forwarded back to the administrative assistant, who creates the proper coding for all sections and adds the icon to each AER class listing in the target quarter class schedule. Finally, all courses and sections using AER are identified in the class schedule (see fig. 23.3).

### **BUS 119 BUSINESS COMMUNICATIONS**

▽ 1525 A 5 W 11:00a.m.-12:55p.m. HSB 105 ALLWINE T  
Hybrid class; partially online. © Uses Alternative Educational Resources.

Figure 23.3: Course from class schedule that uses alternative educational resources


## **IDENTIFYING AER IN A CAMPUS FLYER AND WEBPAGE**

The library's administrative assistant suggested we talk to the campus graphic designer and have her revise our original flyer promoting courses and sections using AER. Because the graphic designer worked for the marketing department, she was able

to make sure that students had an attractive flyer, and she collaborated with us to incorporate the flyer into the printed version of the class schedule.

By Winter Quarter 2017 we had dramatically increased the number of sections using AER. Faculty and administration were starting to take notice. The advising department was handing out the list of AER classes to all new students, telling them these courses had textbooks that could be accessed online for free or purchased for less than \$30 at the bookstore. We had created an accurate, meaningful list of courses using AER, and students were signing up for them with AER in mind.

Among the challenges that arose was ensuring the currency of promotional materials being distributed. We discovered that although the advising department handed out lists of AER classes to students, they didn't always use current versions. Our instructors individually decide which textbooks they want to use. For example, not all Psychology 100 instructors necessarily use the same course material. We needed to make sure advisers understood that one instructor using AER to teach a section of a course didn't mean all did or that the same instructor would be teaching the same section from one term to the next. We had to find a way to make sure the advisers all got copies of the current AER list and that they could easily get to a file and print more copies if they ran out. We approached College Relations, which supervises our webpages, with this problem. After some discussion, they decided to link the "Class Schedule" webpage (fig. 23.4) to the AER flyer and stand-alone list (fig. 24.5), so all advisers could access as many copies as needed and the document would always be up to date.


**Lower Columbia  
COLLEGE**

[Future Students](#)
[Current Students](#)
[Enrollment](#)

[Class Schedule Home](#)

[Academic Calendar](#)
[Advising](#)
[Bookstore](#)
[Catalog](#)
[Enrollment](#)
[Final Exams](#)
[Graduation Processing](#)

Lower Columbia College publishes class information online and in print once each quarter and is mailed to homes weeks before each quarter begins.

## Spring Quarter 2019


April 8 - June 14 • [Final Exams: June 18-20](#) • Grades Available June 25

[Spring Class Schedule - Online](#)  
 Search for classes by subject, title, number of credits or day of the week.

[Spring Class Schedule - Printable PDF](#)  
 Download or print the class schedule.

[Alternative Educational Resources \(AER\)](#)  
 View list of classes using free or inexpensive textbooks

Figure 23.4: Class Schedule landing page with link to Alternative Educations Resources (AER) list




## Does Your Class Use Free Or Inexpensive Textbooks?

Does your class use **FREE** or **INEXPENSIVE** textbooks? Alternative Educational Resources (AER) are print or digital, free or inexpensive alternatives to commercial textbooks. AER include course materials that **cost our students less than \$30** to use, and include used textbooks and other physical and digital resources. Look for this symbol in your class schedule: ©

### COURSES USING AER — WINTER 2019

ANTH& 206 Cultural Anthropology:DIV-0995	CHEM& 100 Preparatory Chemistry-1770, 1775, 1780	ENGL& 102 Composition II-2800, 2805, 2820, 2825, 2835, 2840, 2850, 3012
ART 130 Introduction to Graphic Design-1055	CHEM& 110 Chemical Concepts w/lab-1780	ENGL 125 Arts Magazine Publication II-2685
ART 241 Beginning Ceramic Art-1080, 1085	CHEM& 121 Introduction to Chemistry-1790, 1795, 1800	ENGL 225 Arts Magazine Publication V-2690
ART 242 Intermediate Ceramic Art-1090, 1095	CMST& 220 Public Speaking-2155, 2175, 2180, 2185	ENVS 150 Environment & Society:DIV-2920
ART 243 Advanced Ceramic Art-1100, 1105	CMST 250 Intercultural Communication:DIV-2145	ERSI 105 Earth Systems-2935
BIOL 150 Human Genetics/Society-1180	CS 170 Programming Fundamentals-2300	HUM 251 Ethics/Policy Healthcare III-3590
BIOL& 160 General Biology-1220	DRMA& 101 Introduction to Theatre-2420	MATH& 107 Math in Society-4260, 4270
BIOL& 160 General Biology w/lab-1255	DRMA 107 Introduction to Acting II-2385	MATH 240 Differential Equations-4225
BIOL& 212 Majors Biology Animal-1265	DRMA 116 Stage Crafts I-2390	MUSC 100 Fundamentals of Music-4415
BIOL& 241 Anatomy & Physiology I-1280, 1285	DRMA 117 Stage Crafts II-2395	MUSC 115 Group Piano Instruction-4445
BIOL& 242 Anatomy & Physiology 2-1315, 1320	DRMA 118 Stage Crafts III-2400	MUSC 145 Beginning Voice-4495
BIOL& 260 Microbiology-1350	DRMA 207 Acting II-2410	NUTR& 101 Nutrition-4995
BTEC 149 Internet Fundamentals-1465	ECON& 105 Introduction to Economics-2525, 2530	PSYC& 100 General Psychology-5305, 5315, 5320
BTEC 150 Introduction to Google Apps-1475	ECON& 201 Micro Economics-2535	SOC& 101 Introduction to Sociology:DIV-5410, 5415, 5435
BTEC 155 Website Management-1480	ECON& 202 Macro Economics-2540	
BTEC 165 Cultural Awareness for Care Professionals - 1505, 1510	ENGL 098 College-Ready English I-2600, 2605, 2610, 2615, 2625	
BUS 100 Foundations Business Success-1585	ENGL 099 College-Ready English II-2640, 2645	
BUS& 101 Introduction to Business-1690, 1705	ENGL& 101 English Composition I-2735, 2750, 2755, 2770, 2775, 2780	
BUS 119 Business Communications-1600, 1605		
BUS 165 Salesmanship-1640		
BUS 244 Human Resource Management-1665		
BUS 264 Principles of Marketing-1670		



"Open Textbooks" is licensed under CC BY 3.0

Figure 23.5: Stand-alone list for alternative educational resources (AER) courses at Lower Columbia College

Beginning in 2019, LCC instituted a process to create a new flyer every quarter, thus ensuring that all current AER courses are

listed in the class schedule. The updated flyer is linked on the “Class Schedule” webpage. To make sure the flyer is accurate, we send out a draft list of course sections using AER to all faculty each quarter asking them to confirm the accuracy of the list. This means that every quarter, instructors are reminded they could be using AER and whom to contact if they want to find open resources. Emails to the OER librarian and the bookstore manager from faculty asking how they can get their classes on the AER list testify to the growing interest from instructors.

Our Fall 2018 accreditation visit by the Northwest Commission on Colleges and Universities produced a commendation:

The Commission commends the library and learning commons staff for their dedication and enthusiasm in support of the campus community. The initiative to pilot and embrace Open Educational Resources (OER) to make textbooks affordable for students is especially noteworthy (Wendy Hall, email to author, 2018).

We are proud of this result, a notable achievement for a small college with an enrollment of 2,700. In Winter 2019 (January-March 2019), 54 classes used AER, encompassing 92 sections. As reported in “AER/OER Talking Points” (Internal memorandum March 26, 2018), LCC estimated that we had saved students over \$1.3 million over the past 3 years.

## **STRATEGY UPDATES**

Following implementation of LCC’s local initiative, Washington State House Bill 1375 proposed a unified system for coding and labeling classes across all 33 of its community colleges. As a result, LCC made a few changes to align our program with those of other colleges in the system.

We adopted the statewide nomenclature for OER, defining two distinct types of materials. Some courses use standard OER, and the marking for them is now “OER.” Our AER—alternative resources that are not open access—HB 1375 labeled with the

new designation “Low Cost Materials” (Washington Community and Technical Colleges 2019). The legislation required that we apply one or the other of these codes to all our classes formerly designated AER. This new system took effect in Spring 2020.

In addition, HB 1375 raised the monetary upper limit of Low Cost Materials. Course texts totaling \$50 or less, up from our \$30 determination, qualified as Low Cost Materials. Raising the low-cost threshold has allowed us to include more courses with inexpensive texts as AER.

## **RECOMMENDATIONS**

1. Make friends with your marketing or public relations department. They will be able to help you create flyers to hand out around campus identifying OER/AER. They are likely responsible for your school’s webpages and may also be tasked with posting the online class schedule. If so, they can make the OER or AER list easily accessible online.
2. Find out who is responsible for the codes in the class schedule and make friends with them too. Work with them to discover how courses can be tagged and to ensure that all OER/AER sections are properly identified.
3. Be prepared with data. Administrators may resist adding “one more code” to the many required by the information management system without a compelling case. Unless one’s school or system requires identification of OER/AER, administrators may need statistics showing that students prefer to know which sections can save them money and that they find OER/AER at least as useful as traditional textbooks.
4. To identify all courses and sections that use OER/AER, begin with classes and faculty you know use alternative resources, then get those faculty to help you identify other possible instructors or classes. Keep a spreadsheet of these

instructors and classes. Next, work with the bookstore to identify any additional classes which use open or low-cost materials. Maintain this list, updating it every term.

5. Get faculty to help you review the list of courses every term to ensure accuracy. Email faculty a list of their classes that might be OER, using a subject line that will attract their attention and make them more likely to read the email, such as “Your spring classes” or “Information for your advisees.” As you get responses from faculty, update your spreadsheet so that you maintain a complete and accurate list of all the relevant classes.
6. Stay on top of the timeline. Deliver the faculty approved list of courses and sections to both the public relations department and the person in charge of the schedule in time, usually 2-6 months before the quarter starts. They will need time to prepare a flyer, add the codes, and send material out to faculty and students.





## CHAPTER 24.

### MT. HOOD COMMUNITY COLLEGE

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HEATHER WHITE

#### Oregon

**Type of Institution:** Community college

**Impetus:** Oregon House Bill 2871

**Student Information System:** Jenzabar (JICS user portal; CX staff interface)

**Markings Used:** No Cost: \$0 and Low Cost: Under \$50

**Unique Features:** Creation of a course section reporting form for instructors

#### INTRODUCTION

Mt. Hood Community College (MHCC) is a small institution of under 8,000 full-time equivalent (FTE) students, run on a quarter system. MHCC is located 30 minutes outside of Portland, Oregon, in the city of Gresham. In July 2015, the Oregon

legislature passed House Bill (HB) 2871, which established a statewide mandate for all publicly funded universities and community colleges to “prominently designate courses whose course materials exclusively consist of open or free textbooks or other low-cost or no-cost course materials” at the point of course registration. The legislators allowed each institution the flexibility to determine their own implementation strategy. This case study outlines how MHCC came into compliance by Fall 2017, how our work evolved over the first two years of implementation, and how we navigated the complexities of implementing new policies and procedures in a large organization with multiple stakeholders.

In 2015, few schools in Oregon had a **student information system (SIS)** with existing functionality to enable the **course markings** required by this new law. Five schools used a Jenzabar SIS: Klamath Community College, Southwestern Oregon Community College, Tillamook Bay Community College, Treasure Valley Community College, and MHCC. All five schools used Jenzabar JICS as their student and instructor portal; our colleagues used Jenzabar JX for their staff interface, while MHCC used the slightly more archaic CX. These three Jenzabar software programs—JX, CX, and JICS—lacked the necessary functionality to manifest the HB 2871 mandated course markings, much less make them searchable by users.

Amy Hofer, Oregon’s Coordinator of Statewide Open Education Library Services at Open Oregon Educational Resources, was integral in helping our institutions reach compliance. In Fall 2016, she gathered all the Jenzabar schools for a group brainstorming session. We quickly realized that without software enhancement we would be unable to comply with HB 2871. Under Open Oregon’s leadership, key representatives from each institution met with Jenzabar representatives and explained our needs. Acting separately, each of us would have faced our own software enhancement fee—a considerable expense—but

negotiating as a collective under a state legislative mandate, we were able to work with Jenzabar to arrive at a rather good deal: one software enhancement fee of \$15,000, split across all five institutions in exchange for building out the necessary course marking and search functionality for each of us. Open Oregon proposed a model in which each school paid proportionally according to FTE. As the largest school by FTE, MHCC gladly accepted the largest share, which we believed to be the most equitable solution.

Jenzabar completed their work within two weeks. They created a new field in CX and JX to enable the course markings on individual course sections. A new column in JICS displayed the course markings. The search functionality added in JICS enabled students to limit their search by the course markings. Afterward, each school individually planned their own implementation according to local needs.

## IMPLEMENTATION

MHCC already had an active Textbook Affordability Team (TAT; Mt. Hood Community College 2020b), created following a keynote address from Dr. Cable Green, Creative Commons' Director of Open Education, at In Service for Fall 2015. TAT members included college instructors, librarians, bookstore staff (college owned and operated), deans, student government officers, and the college president. In Fall 2016, the TAT formed a subcommittee to handle HB 2871 course designations. This subcommittee included the textbook buyer from the bookstore, the instructional scheduling and resource analyst, myself (as the library technical services and **open educational resources (OER)** coordinator and co-chair of the TAT), Information Technology's (IT) Jenzabar system administrator, a computer programmer, and the director of infrastructure and application support.

When considering course designations, we asked ourselves a few basic questions:

1. How do we find out which course sections should receive which designations?
2. Should we differentiate between OER and No Cost?
3. How do we define Low Cost?
4. How do we automate the course marking in our course schedule?
5. How do we inform instructors?
6. How do we inform students?
7. And how do we gather data to provide meaningful statistics over time?

The only people who could tell us which course sections should receive which designations were the instructors choosing the textbooks. Though the bookstore already has some of this information centralized and could export the data, importing their data into the SIS (CX) and displaying it in the course schedule (JICS) is impossible as the software programs are not interoperable. Furthermore, textbook orders sometimes come in late or change when instructor assignments change. Some instructors do not assign textbooks at all and, as a result, do not communicate with the bookstore. Therefore, this workflow had to start with instructors, and we saw this as an opportunity to empower them to take control of the rising costs of textbooks.

The TAT has worked with MHCC's student government association (SGA) from the very start. Student representatives were asked for their preferences and insights about course markings—for example, whether open-source materials should be identified and what “low cost” means to students. After deliberating through their formal senate hearings, the SGA asked for just two designations: “Low Cost: Under \$50” and “No Cost:

\$0.” They requested that we not designate OER specifically. They preferred the label “Textbook Price” on the column where the course markings would be displayed (see fig. 24.1), and, in the search drop-down menu, they requested “None Specified” to indicate no limiter had been set (see fig. 24.2).

Add	Course code	Name	Learning Community	Req	Textbook Price	Textbook Link	Note	Seats Open	Status	Schedule	Additional Course Fees	Credits	Begin Date	End Date
	BI231-80	Human Anatomy and Physiology I			No-Cost: \$0	Textbook		39/39	Open	Sheldahl, Laird C / MTR 03:10-05:30PM; MAIN Campus, Academic Center, Lab - Anatomy/Physiology, 1279	\$25.00	4.0	06/24/2019	08/17/2019
	BI232-80	Human Anatomy and Physiology II			No-Cost: \$0	Textbook		39/39	Open	Sheldahl, Laird C / MTR 12:10-02:30PM; MAIN Campus, Academic Center, Lab - Anatomy/Physiology, 1279	\$25.00	4.0	06/24/2019	08/17/2019
	BI233-80	Human Anatomy and Physiology III			Low-Cost: Under \$50	Textbook		28/28	Open	Thatcher, Valory R / MTR 09:00-11:20AM; MAIN Campus, Academic Center, Lab - Anatomy/Physiology, 1279	\$25.00	4.0	06/24/2019	08/17/2019
	BI233-W1	Human Anatomy and Physiology III			No-Cost: \$0	Textbook		28/28	Open	Sheldahl, Laird C / 00:00-00:00AM; DL Campus, Distance Learning, Distance Learning, WEB	\$55.00	4.0	06/24/2019	08/17/2019
	BI234-80	Microbiology			Low-Cost: Under \$50	Textbook		23/23	Open	Blake, Janelle / MTR 10:30-11:50AM; MAIN Campus, Academic Center, Lab - Microbiology, 1702 Thatcher, Valory R / MTR 12:00-01:20PM; MAIN Campus, Academic Center, Classroom, 1710	\$35.00	4.0	06/24/2019	08/06/2019

Figure 24.1: JICS course schedule view of No Cost and Low Cost course markings in Textbook Price column

Textbook Price:

None Specified

None Specified

No-Cost: \$0

Low-Cost: Under \$50

No or Low Cost Course Materials

Figure 24.2: Search limiters in JICS for Textbook Price column of online course schedule

# FIRST COURSE SECTION REPORTING FORM ITERATION (2017)

To facilitate reporting and publishing of course markings, the TAT created a web form that instructors fill out to automatically mark their course sections as either No Cost or Low Cost. Our computer programmer built this Course Section Reporting Form (CSRF) from scratch using C#, ASP.NET, Javascript, HTML, and CSS, and our Jenzabar system administrator configured an application programming interface (API) to

automatically map instructors’ inputs into CX, to be displayed and searchable for students in the online Course Schedule (JICS) at the point of registration, thus bringing us into compliance with HB 2871.

Instructors find the CSRF by logging into their MyMHCC portal (JICS). The form automatically lists the course sections assigned to the person who is logged in. Course section assignments are updated automatically over time, so the upcoming term’s course sections are ready for marking a few weeks before registration opens. See figure 24.3.

MHCC Course Section Reporting Form

HB2871 Mandatory Course Designations

In 2015 the Oregon Legislature passed [HB2871](#) which mandates all state funded higher educational institutions in Oregon to “prominently designate courses whose course materials exclusively consist of open or free textbooks or other low-cost or no-cost course materials.” These designators will take the form of symbols next to your Course Section Code in the online MHCC Course Schedule, available for students at the point of Registration.

**Instructions**

This form is designed to capture data on all Textbook Affordability strategies MHCC Faculty are adopting, including but not limited to the HB2871 Mandatory Course Designations.

Fill this form out for each individual course section you are teaching to indicate what sort of textbook affordability measures you are taking. Please complete this form prior to Registration opening.

See the [Course Designation FAQ](#) to learn how to calculate your textbook costs.

Your Contact Information

Instructor Name

Green, Jack P

Employee ID

Instructor Email

Instructor Phone

Make sure this information is correct. It will be used to contact you if you have questions.

Course List

Term	Course	Section	Title	Report
Spring 2019	MTH111	02	Pre-Calculus I: Elementary Functions	<div>Update</div> <div>Completed (03/22/2019)</div>
Spring 2019	MTH111	W1	Pre-Calculus I: Elementary Functions	<div>Update</div> <div>Completed (03/22/2019)</div>
Spring 2019	MTH251	02	Calculus I: Differential Calculus	<div>Start Report</div>
Summer 2019	MTH111	60	Pre-Calculus I: Elementary Functions	<div>Start Report</div>
Summer 2019	MTH111	W1	Pre-Calculus I: Elementary Functions	<div>Update</div> <div>Completed (03/22/2019)</div>
Summer 2019	MTH112	70	Pre-Calculus II: Trigonometry / Geometry	<div>Start Report</div>

Figure 24.3: Faculty view of the MHCC Course Section Reporting Form

Instructors fill out the CSRF section by section, term by term, for each section they teach, prior to online registration opening for each term. Once they fill it out, the online course schedule Textbook Price column automatically displays No Cost or Low Cost designations (see fig. 24.1). If instructors need to change the

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designation on a course (e.g., to correct a mistake or take over a section from a different instructor), they fill the form out again and the most recent entry will overwrite the previous entry. The MHCC CSRF provides a section on Frequently Asked Questions (FAQ; Mt. Hood Community College 2020a), including on how to calculate course material costs; guidance on this question was derived from Portland Community College's comparable CC-BY FAQ, also written to comply with Oregon HB 2871.

As Library Technical Services and OER Coordinator, I worked with our computer programmer, and together we developed the bulk of the CSRF design. We met with five instructor beta testers and revised the question structures and form functionality based on their feedback. Initially, we wanted the questions to serve as a change management tool, to guide our instructors into a new way of thinking. We wanted them to start considering what the total cost of their courses were, beyond tuition and fees. We also wanted them to pay attention to what kinds of copyright licenses govern the use of their course materials (see fig. 24.4 and fig. 24.5).

The first CSRF question generates the No Cost and Low Cost markings in our course schedule, and it only does this if instructors answer either "Completely Free!" or "\$1-\$49," respectively. While we do not mark anything beyond these cost thresholds in the Course Schedule, we gather data on which course sections are using OER regardless of HB 2871 and which course sections have an expensive textbook that is used for multiple terms over a sequence of courses.

**Report Form for MTH111 02 - Pre-Calculus I: Elementary Functions (Spring 2019)**

**1. What is the total amount of all required course materials—textbooks, course packs, workbooks, lab manuals, access codes, online homework platforms, etc.—cost for your course section? (choose one) \*required**

[Need help?](#)

- ☐ Completely Free!
- ☐ \$1 - \$49
- ☐ \$50 - \$99
- ☐ \$100 - \$149
- ☐ \$150 - \$199
- ☐ \$200+
- ☐ I'm not sure!

**2. Where did you get your pricing information from? (check all that apply) \*required**

- ☐ Publisher's website or sales rep
- ☐ Amazon.com or other online book retailer
- ☐ MHCC Bookstore
- ☐ MHCC Library
- ☐ Other

**3. Is your course section part of a sequence of courses that all use the same textbook? If so, please enter the ISBN in question #7. (choose one)**

[Need help?](#)

- ☐ Not in a sequence
- ☐ 2 courses in a sequence
- ☐ 3 courses in a sequence
- ☐ 4 courses in a sequence
- ☐ 5 or more courses in a sequence

**4. If applicable, enter the \$ amount of any Course Fees or other supplies students must purchase for your course section: (check all that apply)**

- ☐ Online Course Fee: \$55
- ☐ Other Course Fees:
- ☐ Supplies (clickers, paint, etc.):
- ☐ None.
- ☐ I'm not sure!

*Figure 24.4: First half of 2017 Course Section Reporting Form question design*



5. What kinds of course materials are you using? (check all that apply)

[Need help?](#)

Resource Type	License Type
<input type="checkbox"/> Open Educational Resources	Creative Commons "open copyright" license
<input type="checkbox"/> MHCC Library Resources	Fair Use of "traditional copyright" license
<input type="checkbox"/> YouTube videos	Creative Commons or Fair Use
<input type="checkbox"/> Public domain websites	.gov, etc.
<input type="checkbox"/> Traditional or Custom Textbooks from for-profit publishers	"traditional copyright" license
<input type="checkbox"/> Auxiliary Materials from for-profit publishers	"traditional copyright" license
<input type="checkbox"/> Course Packs	Creative Commons or Fair Use
<input type="checkbox"/> Other: <input type="text"/>	
<input type="checkbox"/> I'm not sure of the copyright license!	

6. If you know how much money you've saved your students in textbook costs for this course, enter the amount here:

(  x  ) x  = \$

7. If you're willing to share your primary course materials with us, please list them here:

Title	ISBN/URL (if applicable)	Cost
<input type="text" value="Title"/>	<input type="text" value="ISBN/URL"/>	<input type="text" value="Cost"/>
<input type="text" value="Title"/>	<input type="text" value="ISBN/URL"/>	<input type="text" value="Cost"/>
<input type="text" value="Title"/>	<input type="text" value="ISBN/URL"/>	<input type="text" value="Cost"/>
<input type="text" value="Title"/>	<input type="text" value="ISBN/URL"/>	<input type="text" value="Cost"/>
Total		<input type="text"/>

Notes (optional)

Maximum 1000 characters.

When you are finished click submit.

[Cancel](#)

Figure 24.5: Second half of 2017 Course Section Reporting Form question design

We implemented this first version of the form in early July 2017. Unfortunately, the majority of instructors had already left campus for summer break, not to return until the end of August. As a result, we did a soft launch over Summer term and worked with our college marketing department to get ready for a CSRF debut in time for Fall 2017.

## MARKETING TO INSTRUCTORS AND STUDENTS

Our marketing team designed a flyer for Fall 2017 In Service (fig. 24.6) as well as posters (fig. 24.7) and postcards (fig. 24.8) informing students of the new course markings. Our director of infrastructure and application support and I co-presented on the CSRF at an In Service break out session, and I later explained

the form in more detail at a Faculty Senate meeting. We put up the student posters around campus, and the postcards went into the New Student Welcome bags and were distributed at relevant service points, such as the front desks at the student union, registration and advising, and the library.

# Complete the Course Section Reporting Form

## and Help Students Better Prepare for Course Costs

In 2015, Oregon Legislature passed HB2871, mandating that state-funded colleges and universities in Oregon “prominently designate courses whose course materials exclusively consist of open or free textbooks or other low-cost or no-cost course materials.” Students at Mt. Hood Community College can view these designations – appearing as either **Low-Cost: Under \$50** or **No-Cost: \$0** – in the Schedule of Classes.

**We need you, the faculty, to help us identify which course sections should receive these designations.** We also need your help letting us know who’s using OER. By filling out the Course Section Reporting Form (CSRF), you can assist us in determining this information. When filling out the CSRF, we’ll ask a few quick questions, including:

- What is the total amount that all course materials, including textbooks, will cost for your course section?
- Are you using Open Educational Resources (OER) or commercial textbooks (or a combination of both)?

**Filling out the entire form should take 5-10 minutes**, and it will provide students with a greater understanding of their total course costs. The form will also let us know if you’re interested in learning more about copyright or textbook affordability initiatives.

---

You can find the Course Section Reporting Form and the FAQ online at  
**[mhcc.edu/CourseSectionReporting](https://mhcc.edu/CourseSectionReporting)**  
Use your MyMHCC login to access it.

---

We appreciate your participation,  
and so do our students!

- The Textbook Affordability Team at MHCC



Figure 24.6: In Service flyer for instructors announcing the Course Section Reporting Form

# Save \$\$\$\$ on Textbooks!

Mt. Hood  
Community  
College offers  
**LOW COST**  
and **NO COST**  
**TEXTBOOK**  
options for  
many classes!

When you sign up for classes using the MHCC Class Schedule at MyMHCC, you'll see participating courses designated as **Low-Cost: Under \$50** or **No-Cost: \$0**

- » Plan for your textbook costs while registering for classes!
- » Worry less about the cost of textbooks!
- » Save money on college!

You can discover more information on Textbook Affordability initiatives at MHCC by visiting [mhcc.edu/TextbookAffordability](http://mhcc.edu/TextbookAffordability)

MHCC Student Poster Approval: Full date: May 1, 2019. Created by: \_\_\_\_\_  
Updated: \_\_\_\_\_  
Please do not post this poster without the approval of the MHCC Student Poster Approval Committee.

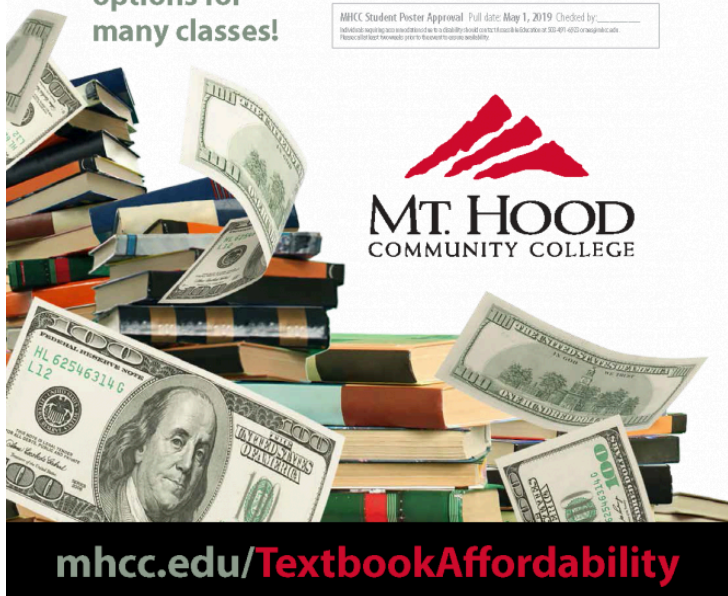


Figure 24.7: Poster for students announcing No Cost/Low Cost course markings

**Mt. Hood  
Community  
College offers  
Low Cost and  
No Cost textbook  
options for  
many classes!**

When you sign up for classes using the MHCC Class Schedule at MyMHCC, you'll see participating courses designated as **Low-Cost: Under \$50** or **No-Cost: \$0**

- » Plan for your textbook costs while registering for classes!
- » Worry less about the cost of textbooks!
- » Save Money on College!



You can discover more on Textbook Affordability initiatives at MHCC by visiting  
**[mhcc.edu/TextbookAffordability](https://mhcc.edu/TextbookAffordability)**

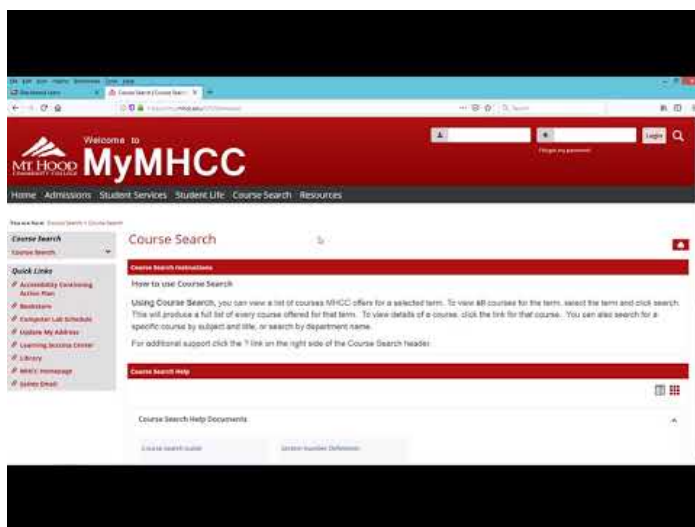
*Figure 24.8: Postcard for students' welcome bags*

I received a variety of feedback through emails and face-to-face comments. Some instructors readily filled out the CSRF with expressions of gratitude for making college more affordable for students. Other instructors were not used to dealing with any logistics about their textbooks—they used the same books chosen by their colleagues, and their departmental administrative assistants placed orders with the bookstore. For these instructors, filling out the CSRF was a new step that they struggled to integrate into their routine course preparation. A few instructors expressed feeling guilt over not already using low-cost textbooks, while others felt trapped by publishers who they perceived as price gouging their students because suitable OER replacements for their expensive textbooks were not available. A very small number of instructors anchored their teaching methods to a specific, high-cost textbook, and they did not want to be pressured into using perceived subpar content.

Providing timely reminders to instructors to fill out the CSRF term to term, year to year, has proven critical but surprisingly difficult to coordinate. Instructors' reporting rates correlated closely with whether email reminders were sent. From the start,

the bookstore included a link to the CSRF in all their emails requesting textbook orders, but this alone has not been enough. In the Fall of 2018 when our marketing focus shifted to students, we did not have the staffing model to provide additional email reminders. While some instructors remembered on their own, our reporting rates were low compared with the previous year. This speaks to the need for sustainable staffing models of OER programs. At first, the TAT thought someone in scheduling or registration should send reminder emails to instructors as an official duty of their department, since these personnel are plugged into rotating registration dates and course markings could be considered a student service; then we thought perhaps staff in instructional services should do it because reporting cost savings could be considered an instructional service. In the Spring of 2019, after I returned from the Open Textbook Network's Certificate of OER Librarianship training, we decided that I would send these reminder emails, as I am increasingly well known among our instructors as their OER coordinator. I set up a schedule to send email reminders 1 week before the course schedule goes live for viewing, and after the Drop/Add period ends, to catch any last-minute instructor changes. With these routine, well-timed email reminders, our reporting numbers increased and stabilized.

In Fall 2018, the TAT's SGA representative reported that the posters and postcards we continued to distribute were not enough—that many students had told him they were unaware of the course markings. This industrious and highly motivated student leader had the idea of making a video tutorial on how to find courses with No Cost and Low Cost markings. Our online learning department and my TAT co-chair helped him with the software and video editing, and the tutorial debuted during the 2019 Open Education Week (Mt. Hood Community College 2019; see fig. 24.9).



A YouTube element has been excluded from this version of the text.  
 You can view it online here: <https://uta.pressbooks.pub/marketingopenandaffordablecourses/?p=148>

Figure 24.9: Tutorial on identifying low-cost and no-cost textbooks on the course schedule

This video is linked from our course registration page, and our marketing department plans to share it out through social media channels during all registration periods moving forward. We expect this will also help the TAT onboard new student government officers year after year.

## DATA COLLECTION & ANALYSIS

Our computer programmer built a back-end reporting tool in JICS for the admin portal of the CSRF to generate CSV reports at any time for any date range (see fig. 24.10). Logins to the CSRF Data Export tool were given to myself and MHCC's institutional

research staff, who use the data to generate meaningful statistics for internal and external stakeholders.

## CSRF Admin

CSRF Data Export

**This form is for administrators of the Course Section Reporting Form (CSRF).**

Use this form to generate a CSV file of current CSRF data.  
For optional fields, leave blank to match any value.

Dates to include: (dates the CSRF was submitted by faculty)

☒ All dates

☐ Select a date range...

Closed records: [What's this?](#)

☐ Include closed records

Advanced Search Criteria:

The following fields are optional.

Faculty ID:

Course:

Section:

Year:

Session:

Any

Cost Designation:

☒ Any

☐ No cost (\$0)

☐ Low cost (\$1-\$49)

☐ Both No/Low cost

☐ No Designation (\$50 or more)

When you are finished click submit:

The CSV file will be emailed to: [Heather.White@mhcc.edu](mailto:Heather.White@mhcc.edu)

Submit

Figure 24.10: Course Section Reporting Form back-end reporting tool

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For example, the CSRF data export tells me that between Summer 2017 and Spring 2018, 75 instructors reported using alternative resources in their courses. Our analytics and institutional research department used CSRF data and the emerging best practice to use a \$100 No Cost/\$75 Low Cost multiplier method to calculate that students had saved over \$1 million between Summer 2017 and Spring 2019. That figure is likely low, as many instructors are still getting used to filling out the CSRF. While there is no incentive for filling out the form, instructors are generally willing to do it when reminded and given a convenient link to click on.

Aside from giving us a clear picture of our successes with OER and textbook cost savings, the CSRF data has inadvertently revealed a small subset of instructors that remain unaware of the benefits of open education, beyond cost savings for students. The TAT is working to address this through professional development training on open pedagogy, best practices, success stories, student and instructor testimonies, and providing curricular support from librarians and instructional designers.

## **SECOND COURSE SECTION REPORTING FORM ITERATION (2019)**

Many of our instructors wholeheartedly embraced OER and other textbook cost-saving methods, yet over the initial two years of implementation, reporting rates dropped off. Establishing the CSRF as part of instructors' routine workflow proved challenging, largely due to the great variation in how different departments select and order textbooks. We decided to shorten the CSRF question design, along with my routine email reminders, in hopes of increasing instructor response rates. In Spring 2019, Open Oregon sent out an extensive data request, which helped us determine how we could lessen instructors' reporting burden.

Open Oregon's request was made on behalf of the state's Higher Education Coordinating Commission. The commission sought assessment data on the impact of the HB 2871 course marking mandate, as well as on student savings resulting from the more than \$650,000 in state funded OER grants given to instructors throughout Oregon between 2015 and 2019. Having clear reporting parameters helped us to see that our initial CSRF question design asked for data we do not need, while missing more focused data that we do need. The TAT worked with our analytics and institutional research staff and with IT to optimize the CSRF to minimize the total number of questions for instructors while satisfying these new state reporting expectations.

We ensured that changes we made did not invalidate past years' CSRF data. We also recruited several instructor beta testers to provide feedback on this shortened version of the form. The question design that we settled on (fig. 24.11) balanced function and user feedback. These adjustments (detailed below) worked: instructor rates of participation increased, and we were able to report over \$2 Million textbook cost savings by Spring 2020.

Report Form for MTH111 60 - Pre-Calculus I: Elementary Functions (Summer 2019)

1. What is the total cost of all required textbooks, course packs, workbooks, lab manuals, access codes, online homework platforms, etc.? (Exclude supplies, calculators, clickers, course fees, and optional texts.) *\*required*

- ☐ \$0
- ☐ \$1 - \$49
- ☐ Over \$50

2. Are you using Open Educational Resources (OER) for this section?

- ☐ Yes
- ☐ No
- ☐ I'm not sure

3. Is this section part of a sequence of courses that all use the same textbook?

- ☐ Not in a sequence
- ☐ 2 courses in a sequence
- ☐ 3 courses in a sequence
- ☐ 4 courses in a sequence
- ☐ 5+ courses in a sequence

[Cancel](#)

Figure 24.11: 2019 Course Section Reporting Form question design

The total cost of all required course materials remains the first data point on the CSRF, as the API continues to automatically publish the No Cost and Low Cost markings in the course schedule. We reduced the number of multiple choices from seven to three, that is, to only what's relevant to HB 2871. The total number of questions was also reduced to three, with the second asking whether the course is using OER, regardless of cost threshold. Because some courses use OER but are still above \$50 for total course materials cost, they would not otherwise be captured by the cost threshold question. Having instructors report OER usage without cost considerations gives us a clean number to report when state legislators and college administrators ask how much OER are being used? After some debate, we kept the course series question because we believe that it yields valuable cost-savings data, even though reporting such data is not required by law.

We removed the "Need Help?" links to the FAQ from the CSRF because instructors were not clicking on them anyway. We

removed the notes field because no one was monitoring these notes in real time, and we removed the questions about course materials, cost-savings calculations, and ISBN and URL fields since these were superfluous. These modifications produced an uncluttered form capable of collecting all the data we need while reducing the burden for instructors of completing a long form.

Our first albeit lengthy CSRF iteration was intended as a change management tool, to prompt a cultural shift in how instructors think about course materials. From my perspective it seems to have worked. By Spring 2019, the new cultural norm had become to keep textbook costs to a minimum. Instructors' rising interest in OER is evidenced by how many of them apply for OER grants and attend OER conferences.

## **SUSTAINABILITY ACROSS COLLEGE SILOS**

By early summer 2019, MHCC student services reached the final development stages of a beta release of a brand new course registration user interface with the vendor EAB Global. Unfortunately, because the project had been undertaken without involving TAT stakeholders, the No Cost and Low Cost course markings required by HB 2871 were overlooked in the initial software design. I did not become aware that a new user interface had been undertaken until June, but once the project manager was alerted to the problem, she immediately contacted EAB and explained that we could not launch the official release of the new registration interface until EAB modified the software to include the No Cost and Low Cost course markings. EAB set to work developing a short-term solution using the No Cost/Low Cost CX field that was created from the Jenzabar software enhancement fee back in 2016, but this stopgap will require extra clicks and will not be searchable by students.

Our in-house system offers tremendous benefits. It enables direct control over data inputs and outputs, so when we decided

we wanted to change the question design, there was no vendor to limit our options or charge us a configuration fee; and in the rare case of a glitch (only two in the very beginning), we had our own internal IT support. At some point in the future, EAB plans to develop robust course marking functionality that rises to the level of our JICS implementation—we are just one of many customers across the country that have requested this textbook cost reporting functionality. Until EAB is able to maintain our compliance with HB 2871, however, we will prioritize our current JICS course registration interface.

Silos in higher education are nothing new. Though we came close to accidentally breaking a state law, not to mention undoing two years of carefully cultivated instructor relations, CSRF design, testing, and implementation, marketing, student training, and state reporting of cost savings data, this mishap can be appreciated as a growing pain of our textbook affordability program as institutional awareness widens across departments and administrative offices. The TAT started in 2015 as a grassroots movement among instructors, staff, and student government, operating in between the official college departments that have vested authority over college operations. We had very little administrative oversight. Over time, we grew to take on major projects such as an internal OER grant program funded by the MHCC Foundation, the creation of an official OER coordinator position, and No Cost/Low Cost course markings. The fact that compliance with HB 2871 was left out of major planning meetings of high-level administrators across the college indicates the need for an administrative home for No Cost and Low Cost course markings to secure inclusion in college planning.

The three-pronged nature of these course markings prevents responsibility for HB 2871 compliance from fitting easily into our administrative structure. The course markings in the registration system are a student service; instructors filling out

the CSRF is an instructional service; and the data analysis and reporting is an institutional research service. Silos notwithstanding, finding a college administrator to take ownership of compliance with OER legislation is one of the TAT's primary needs moving forward. The chief information officer of IT, meanwhile, has set up a safety net: these legally required No Cost and Low Cost course markings are now officially in IT's list of mission-critical services that must be maintained over time, as programs and technologies change, and the OER Coordinator has been added to IT's list of point people to check in with when embarking on new projects.

## **RECOMMENDATIONS**

1. Develop your inputs and outputs with all of your users from the very start. Determine your state reporting requirements (if any); engage your students to find out what is truly useful for them; engage your instructors through awareness campaigns and beta testing—and value their input; repeatedly remind them to fill out your forms; and make changes based on user feedback. If it does not work for them, it will not work for you.
2. Determine your IT department's project management style and how they keep track of mission-critical services. It is very likely they will need to plan ahead to allocate staff resources for your project.
3. Have clearly defined policy/functionality definitions for your online forms and sanitize your inputs (i.e., ensure users cannot insert code or anything inappropriate into text fields).
4. Minimize manual data entry and do not let perfection be the enemy of the good. You might have some reporting errors and underreporting; the process has a learning curve but will ultimately empower instructors to step forward into the textbook cost conversation.

5. Team up with your campus bookstore, particularly when state legislation requires them to display course markings too. When working with third party bookstores, be on guard for “**open wrapping**” and “**open washing**” clauses in their contracts that might impose on your course marking workflows—providing unfettered access to free and low-cost textbooks runs contrary to their profit-driven model.
6. Designate one high-level college administrator to take responsibility for legal compliance with state laws governing course markings. Keep all college administrators informed and empowered, particularly your college president. They will champion this student-centered work with the board of education and state legislators, which provides strong roots for a successful implementation.
7. Be patient and be kind toward your instructors, administrators, and everyone struggling with the change. OER is breaking some very old patterns, so listen closely to the concerns of those who resist. They will probably provide something useful that you had not thought of. It is a learning process for everyone that requires skill in navigating disruptive change.





## CHAPTER 25.

### NICOLET COLLEGE

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CINDY DOMAIKA

#### Wisconsin

**Type of Institution:** Community college

**Impetus:** Transparency for student decision making

**Student Information System:** PowerCampus (Ellucian)

**Markings Used:** No Cost and Low Cost

**Unique Features:** Initiative led by campus bookstore

#### BACKGROUND

Nicolet College is a rural, two-year community college that is part of the sixteen-district Wisconsin Technical College System. We are one of a handful of colleges in the state that offer both occupational and liberal arts programs. As of the 2016/17 academic year, we had approximately 1,900 full- and part-time students.

Our **open educational resources (OER)** program started in Fall 2016 during a redesign of the institutionally owned college bookstore when the college president asked me (then the bookstore manager) to start investigating OER. Our campus was unfamiliar with OER, and we spent the subsequent months trying to figure out how the bookstore might promote its use by instructors. By Spring 2017, we had formed an advisory committee to start a more systematic OER outreach at our Nicolet. Our advisory committee drew in people from around the college, including, disability services, library staff, instructional designers, and student services. Most important, we had instructors who were willing to pilot OER the following semester, Fall 2017.

During the first semester, 16 courses with 23 sections adopted either OER or free course material. By Spring 2018, the number of courses rose to 17, with 29 sections. For Fall 2018, we offered 49 courses with 79 sections. At this point, the advisory committee recognized the need to do something to help students identify these courses at the point of registration. Designating courses was an important next step, not only for students who preferred to take these courses, but also for students who preferred not to. Alternative sources sometimes had significant drawbacks for our student population. Many students are still warming up to the online environment, and many have internet access issues, compromising their ability to access digital OER. Though many of the materials are printable or have a print option, many don't, limiting the ability of some students to read the materials in their preferred mode.

## **COURSE DESIGNATION**

Our initial meeting to discuss course designation consisted of myself (now manager of open and instructional resources), the registrar, the assistant to the registrar, the director of enrollment,

the interim dean of liberal arts, and the director of instructional effectiveness and flexible learning.

Our first question for the registrar was “Can this be done?” We were assured it could. It then became a matter of logistics:

- Who would lead and coordinate the designation(s)?
- How we would execute our plan collaboratively?
- Where in the campus systems and infrastructure should the designations reside?
- What kind of designation(s) were needed?
- When would we be able to implement?

The following sections describe each of these obstacles and our thought process in detail.

## COORDINATING DEVELOPMENT

Who was going to take responsibility for the designations? The campus bookstore had all the information needed to determine the designations for section inclusion. The process for instructors to turn in the course materials requirements to the bookstore was already in place, and the bookstore had the most current pricing. The bookstore was charged with determining the course sections the designations applied to and communicating this information to the assistant to the registrar, who would attach each respective section or course. The only piece missing was the process to transfer this information over to the registrar’s office.

## COLLABORATION

The process arrived at begins with the manager of open and instructional resources coordinating the course materials for the bookstore. A “materials” or a “no materials” designation is required in the bookstore system, which helps eliminate the

potential of courses not receiving a designation. Upon receiving course material requests from faculty, an email is sent to the assistant to the registrar of any sections that need No Cost or Low Cost course notes and which one applies. Batches of information are sent on a daily basis as course materials requirements come in to be attached to the courses in the bookstore system. The assistant to the registrar applies the appropriate designation to the sections through Nicolet's PowerCampus student information system, and they appear on the course schedule as a course note.

## PLACEMENT

The course designation would appear as a course note immediately below the section it was attached to in the course schedule. The designation would also be attached to the section when a student printed off their schedule or looked at it through the student portal. The student portal is an application from Ellucian called the Ellucian portal, which integrates and runs on top of Sharepoint 2013. Students can do a variety of things through the portal, from adding and dropping courses to viewing their course schedules. Adding the course note has not interfered with the way students see their course information on either the overall course schedule or their personalized course schedule.

## WORDING

We knew that the wording we used needed to be short and simple, yet convey the transparency we were aiming for. We chose two designations, No Cost and Low Cost, which would appear as course notes immediately below a section on the course schedule (see fig. 25.1).

<b>2080121900 English Composition I</b>		<b>2043 Class</b>	Edward O'Casey	<b>3</b>
08/27/2018 - 12/19/2018	Mon/Wed	11:20am - 12:45pm	Rhineland - Red Oak Center 202	
No Cost - This section does not require you to purchase resources and may make use of electronic resources instead (may change by instructor)				
<b>2080121900 English Composition I</b>		<b>2044 Class</b>	Shane Teter	<b>3</b>
08/28/2018 - 12/20/2018	Tue/Thur	8:00am - 9:25am	Rhineland - Red Oak Center 204	
No Cost - This section does not require you to purchase resources and may make use of electronic resources instead (may change by instructor)				

Figure 25.1: Course note on the course schedule

We decided not to include the term “Open Educational Resources” or “OER” for two reasons. First, not all of the No Cost resources were OER. Some courses used library resources, links out to copyrighted resources, or other free to student resources that would not be considered OER. Second, most students did not know what “OER” means. We wanted to use terms that first-time students would readily understand.

Early in our deliberations, we wondered whether a No Cost designation was adequate and wrestled with the value of adding a second designation for low-cost materials. To help determine this, we looked at the range of textbook prices over the previous several semesters. Prices ranged from \$10 to \$300, depending on the subject area. While students did have the ability, through the bookstore’s website, to find out what their textbook costs would be prior to courses starting, we wanted to surface that information for them and make it as accessible as possible. Additionally, a jump in cost from \$0 to even \$125 is a lot for a student. We reviewed an ongoing survey by OpenStax (Finkbeiner n.d.b.) that has data on what other colleges are doing for their no cost and low-cost markings. We decided to include the Low Cost designation with the higher threshold of \$50 for new textbooks.

Each designation is followed by a descriptive definition in the course note. Students selecting a No Cost course will see the note “No Cost – This section does not require you to purchase resources and may make use of electronic resources instead.” Similarly, selection of a Low Cost course will return the note “Low Cost – This section uses resources costing less than \$50.”

We add the course designation to the schedule as soon as possible so students can make informed decisions, but instructor changes do happen. At Nicolet College, we allow instructors to choose their own textbooks and do not require all sections of the same course to use the same textbook. In rare cases, last-minute changes to the schedule may occur in which the new instructor chooses to use a textbook that does not meet the definition of either No Cost or Low Cost. We try to remove the designation as soon as this happens, but we decided to add the wording “may change by instructor” to both designations’ course notes as a disclaimer and a caution to students to check materials requirements before the start of term as these are ultimately up to the instructor.

## TIMELINE

Our first meeting on **course markings** occurred at the beginning of April 2018. Students had already started signing up for both summer and fall courses. We wanted to get the new course markings in place as soon as possible to help students make informed decisions. Implementation was initially set for May 2018, which would allow for course designations to be available for most Fall 2018 registrations. We finalized our process and wording and received approval from the academic leadership team within a mere two weeks. Once approved, the designations were immediately added to both semesters and displayed on both the course schedule and students’ schedules. Thus, course markings went live in April 2018, ahead of the planned May date, making them available for students registering for both Summer 2018 and Fall 2018 courses.

## BENEFITS & CHALLENGES

### BENEFITS

Our first full semester with the course designations was Fall 2018. We have not yet measured the impact of implementing

course designations. The course marking has enabled us to be transparent with our students, not only about cost but also about the use of electronic resources in courses. Our students vary in their technological abilities. Some are not fully comfortable using electronic resources. Course markings give them the choice upfront between taking courses that depend on digital sources and access to the internet or those using more traditional materials. The markings have started conversations between students. I have overheard students talking about the course notes on their schedules and expressing relief when they are signed up for the No Cost section of a course.

For the 2018/19 academic year, a plan was undertaken to monitor enrollments in courses and see if there is a correlation between the No Cost and Low Cost designations and higher enrollment. One of the desired outcomes is to provide a pathway to zero-textbook cost degrees, or **Z-Degrees**. This will entail educating both students and staff on what Z-Degree pathway actually means for them.

## CHALLENGES

Our system does not allow students to search for courses based on course notes. Students may become aware of No Cost and Low Cost designations only on a close scan of the whole course schedule. Further, sections may have multiple notes attached to them, heightening the risk that the designation course note may be overlooked.

Because our workflow relies on two or three key staff, the entire process can be held up if someone is out of the office. No backup system is in place to ensure the information is advanced, entered, or attached if the person responsible for a task is unavailable.

Overall, we have had positive faculty feedback on the designations, especially from those in programs involved with the development of **Z-degree** pathways. However, some

instructors reported misgivings during the process. Though not necessarily opposed to OER, instructors may feel undercut by a perceived pressure to change what is working in their courses just to get a special designation. Colleagues may feel as if they are competing against each other in a drive for enrollment numbers. The intent is to do what is best for our students, but we recognize course marking may complicate how instructors approach OER and free materials.

## **RECOMMENDATIONS**

1. Solicit feedback from instructors and take time to speak independently with those who have concerns about the marking.
2. Use clear language that gives students concise, easy-to-understand information.
3. Don't overcomplicate it. Improve the process as your program grows and as lessons emerge from each term's implementation.



## CHAPTER 26.

### STATE UNIVERSITY OF NEW YORK

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ALEXIS CLIFTON, TONY DEFRANCO, AND MICHAEL DALY

#### New York

**Type of Institution:** Public state system with 64 institutions, including research universities, academic medical centers, liberal arts colleges, community colleges, colleges of technology, and an online learning network.

**Impetus:** Early open educational resources (OER) initiative at Tompkins Cortland Community College; Achieving the Dream grant; state funding.

**Student Information System:** Varies by school. Banner (Ellucian) is the most popular, followed by other Ellucian registration products, such as PowerCampus. Other systems in place include PeopleSoft and individualized tools.

**Markings Used:** Varies by school (e.g., Attribute Type: [OER] Open Resource Textbook)

**Unique Features:** Office dedicated to assisting campuses adopt OER;

system-wide implementation of marking OER sections in a comprehensive back-end reporting tool.

## BACKGROUND

The State University of New York (SUNY) is the largest comprehensive university system in the United States. Our 64 institutions include research universities, academic medical centers, liberal arts colleges, community colleges, colleges of technology, and an online learning network. SUNY serves nearly 1.3 million students in credit-bearing courses, continuing education courses, and community outreach programs. SUNY was created out of a commitment to providing opportunity and access to New York residents and is designed to meet diverse needs across the state.

The following case study first provides an overview of SUNY's system-wide open and affordable **course marking** initiative and then zooms in on two key case studies from institutions within the system, Tompkins Cortland and Fulton-Montgomery community colleges. The activities reported in these institutional case studies preceded the state-wide initiative, informing how SUNY operationalized the call to designate courses that use **open educational resources (OER)** with a marker. This case study will be most useful to readers interested in how consortial or state-wide calls for course marking can balance group needs with the cultures and mission-driven needs of individual campuses.

## SUNY OER INITIATIVE

Trends in OER adoption, implementation, and creation across SUNY gained national visibility in 2015 when the Achieving the Dream OER Degree Initiative (Achieving the Dream 2020)

awarded grants to five SUNY community colleges. Two years later, Governor Andrew Cuomo announced \$8 million in state budget funding dedicated to OER in higher education, to be split evenly between the SUNY and City University of New York systems.

The 64 SUNY institutions primarily function as independent units within a federated system, with shared direction and services stemming from the system offices. SUNY distributed the four million 2017/18 state fiscal-year dollars to individual campuses, allowing them to determine the most fitting way to use these funds in alignment with local initiatives and priorities. By accepting these state dollars, SUNY institutions agreed to the following:

1. Encourage OER use in high-enrollment, general education courses
2. Ensure all designated SUNY OER courses keep that designation for 3 years
3. Report data about SUNY OER courses back to system administration

SUNY's Faculty Advisory Council on Teaching and Technology 2015 working group developed the definition that SUNY OER courses meet: "The majority of materials in this section resides in the public domain or has been released under an intellectual property license that permits repurposing by others." This specification expands the William and Flora Hewlett Foundation definition of OER (Hewlett Foundation 2015) to provide flexibility to courses, programs, and institutions transitioning to OER for the first time.

The 2017/18 OER initiative garnered participation by 58 SUNY campuses. These schools reported more than 2,600 individual SUNY OER course sections of more than 600 individual course

titles. The initiative saved more than 69,000 students \$7.8 million in course material costs in one academic year.

## **SUNY OER SERVICES**

SUNY system administration recognized a need to provide support to individual campuses in order to scale OER program development. SUNY OER Services (SOS) launched in 2016, just prior to the first large statewide funding disbursement, responding to growing needs for OER infrastructure. SOS assists SUNY institutions looking to build, maintain, and expand open educational programs and practices. The office helps lower the cost of higher education for students and empowers faculty to use course materials most suited to their needs.

Along with maintaining our Ready-to-Adopt collection of OER courses (SUNY OER Services n.d.), SOS assists in content curation and provides professional development. Staff members provide consultation and services to support identifying, customizing, and building new open content in both digital and print formats. SOS also collaborates with schools and departments to offer professional development through online or face-to-face workshops and mini-courses. SOS helps build mentoring relationships and peer networks for continuous growth in using OER successfully.

## **SYSTEM-WIDE COURSE DESIGNATORS**

The SUNY Institutional Research and Information System (SIRIS) is one of the few tools common across all SUNY campuses. SUNY's Institutional Research Office utilizes SIRIS to gather and generate data across a wide variety of course elements, including success and retention rates. SIRIS was a logical fit to begin to capture OER usage and effectiveness data across the system. The Institutional Research Office created an OER course designator code for SIRIS early in 2017 and distributed implementation instructions to all participating OER

Program campuses. The course designator was specific to OER, rather than low-cost or zero-cost textbook initiatives, because of the emphasis on OER in New York State funding initiatives. Campuses were asked to apply this designator to OER-supported courses to reflect the impact of received OER state dollars.

The SIRIS code and methodology was designed by the SUNY Information Technology Exchange Center, and the OER course designation in SIRIS is for administrative purposes only. This code is for back-end data reporting and is not visible to faculty or students. Course section identifiers are added to SIRIS following a process described in SOS's "OER Data Collection Overview (Coding Banner)" (internal communication n.d.). Technology staff at individual SUNY institutions establish this coding process into their local data reporting structure. Once this step is completed, campuses can apply the OER course designation to courses at any point in the semester or after the semester has concluded. A sample report from SIRIS with this designation is found in Table 26.1.

Table 26.1: A segment from a report from SIRIS returning sections with OER course designations

Open Educational Resources Y/N	Term	State/Comm College	Campus Type Description	Campus Name	Campus Section ID	Section Title	Section Count	Student Count
Yes	Spring 2019	Community Colleges	Community Colleges	West chester	10749	General Psychology	1	23
Yes	Spring 2019	Community Colleges	Community Colleges	West chester	10868	Native People of North America	1	23
Yes	Spring 2019	State Operated	Doctoral Degree Granting Institutions	Stony Brook	CSE30702B	Principles of Progr Languages	1	76
Yes	Spring 2019	State Operated	Doctoral Degree Granting Institutions	Stony Brook	CSE30701B	Principles of Progr Languages	1	78
Yes	Fall 2018	State Operated	Doctoral Degree Granting Institutions	Stony Brook	AST10501A	Intro to the Solar System	1	118
Yes	Fall 2018	State Operated	Technology Colleges	Delhi	201809.103	Business Comm.	1	24
Yes	Fall 2018	State Operated	Technology Colleges	Delhi	201809.1055	Freshman Composition	1	24

The goal is to make SIRIS the only official OER course reporting mechanism for all campus OER funding allocations. This will move away from the initial method of campuses self-reporting SUNY OER courses on individual spreadsheets by email. Acknowledging that SIRIS course designation implementation procedures move at different speeds at different campuses, system administration is allowing for a 3-year window after a campus signs on to a local OER initiative toward this SIRIS-

only requirement. For most participating schools, this will be completed by the 2020/21 academic year.

As the same campus units who are responsible for SIRIS reporting also typically manage course registration systems, the question of adding a public-facing OER course designation for students is a natural companion conversation at many SUNY schools. This public course marking is not required by SUNY system administration for OER funding distributions but is encouraged where campuses deem it useful.

## STUDENT INFORMATION SYSTEM COURSE MARKERS

Unlike the system-wide use of SIRIS for back-end data reporting, SUNY **student information systems (SIS)** are particular to individual institutions. Each campus uses its own instance of the system of its choice. Banner by Ellucian is the most popular, followed by other Ellucian registration products, such as PowerCampus. Other systems in place include PeopleSoft and individualized tools.

At least one SUNY institution of each SIS registration system type has implemented student-facing open and affordable course markers and has passed that process along to other institutions within the system. Tompkins Cortland Community College (TC3), for example was an early leader in OER usage and was the first campus to utilize a SIS course marker. Campus leadership at TC3 developed a method for PowerCampus (described in more detail, in the Tompkins Cortland Community College case study, later in this chapter). Westchester Community College is the only SUNY community college using PeopleSoft, yet it tackled the process of establishing SIS course markers by conferring with other schools nationally. Banner, being the most widely-used tool in the SUNY system, has the most developed documentation for revealing open and affordable course markers, including for schools that want to make it a filterable factor in the top search.

Figure 26.1 is a screenshot of the Banner interface at Corning Community College, showing this filter in action. Students are able to perform an advanced search based on whether a course utilizes OER.



## Class Schedule Search

<b>Subject:</b>	<div> All  Accounting  Anthropology  Arts/History &amp; Studio  Astronomy  Auto Body  Automotive  Biology  Business General  Business/Office Technology </div>	
<b>Course Number:</b>	<input type="text"/>	
<b>Title:</b>	<input type="text"/>	
<b>Schedule Type:</b>	<div> All  Computer Based Instruction  Experiential Learning </div>	
<b>Credit Range:</b>	<input type="text"/> hours to <input type="text"/> hours	
<b>Campus:</b>	<div> All  ACE  Corning Community College </div>	
<b>Course Level:</b>	<div> All  Non-Credit Cont Ed  Undergraduate </div>	
<b>Part of Term:</b>	<div> All  a. Full Term - 15wks  b. 1st 5 Week Modules </div>	
<b>Instructor:</b>	<div> All  Abbott, Tyson K  Aikin, Michael </div>	
<b>Session:</b>	<div> All  Airport Corporate Park  Bath/Avoca/Cohocton/Hammondspo </div>	
<b>Attribute Type:</b>	<div> All  (OER) Open Resource Textbook </div>	

Figure 26.1: Corning Community College class search options

Not coincidentally, many of the early adopters of open and



affordable course markers are also schools that have established an OER course fee. These fees range from \$10 to \$25 and are used to support OER course development and administration locally. SUNY community colleges can independently establish course fees, though SUNY comprehensive colleges and research centers cannot.

As of May 2019,

- 36% of participating institutions have both SIRIS OER course designators and SIS open and affordable course markers (21 schools);
- 32% have SIRIS OER course designators in place but have not implemented SIS open and affordable course markers (19 schools);
- 23% have active committees or working groups to evaluate SIRIS OER course designators and/or SIS open and affordable course markers; and
- 9% have not begun the process of implementing SIRIS OER course designators.

OER program leadership at participating campuses report various successes and challenges pertaining to both SIRIS OER course designators and SIS open and affordable course markers. The following themes are important considerations or trends, regardless of institutional context.

## PROCESS IS KEY

Even though the mechanism for adding the OER course designator to SIRIS is relatively straightforward, the intention behind when and how it is used needs to be considered. This becomes even more significant when public-facing SIS open and affordable course markers are added into the equation. SUNY

campuses must address important questions with both SIRIS and SIS implementations:

- Who is responsible for marking courses in SIRIS and SIS?
- Who reviews marked courses to ensure they meet the criteria?
- How early in scheduling will SIRIS and SIS course markers need to be applied?
- How is the language of SIS course markers determined?
- How is the language of SIS course markers communicated across campus?
- How will the SIRIS and SIS course designation and marking process be replicated from semester to semester?

## OER VERSUS OTHER ALTERNATIVE RESOURCES

SUNY Canton began using both SIRIS and SIS OER course designation markers in 2017/18. Canton's registrar asked deans to determine which courses were eligible for the OER indicator. Faculty inadvertently reported courses to these deans that used free copyrighted materials that did not meet the established definition of OER. While impact to students from this mislabeling was minimal, the impact to SUNY SIRIS was substantial. SUNY system administration awards OER funding to each campus based on the number of OER courses a campus runs each year. These misreported courses could have caused a significant overpayment of OER funding to the Canton campus. This issue was caught in time, thanks to routine double checking by the OER budget manager in the system administration office. Canton's OER program coordinator and registrar then had to clean the data reported back to SIRIS.

Canton's situation spurred campus-wide conversation among faculty, OER leadership in the library, and registration

personnel. This resulted in a request for SIS recognition of two factors: OER and Low-Cost. The change enables Canton to mark low-cost courses, which may use OER and non-OER materials, in their SIS course schedule. The OER distinction will be maintained in the SIRIS OER course designations reported back to system administration, however. Canton has shared this language and methodology with the community of OER campus leaders across SUNY, so that other institutions may adopt a similar approach if desired.

## RELATING OER TO LOW-COST

In fact, conversations at many SUNY campuses similar to that among SUNY Canton's faculty and other stakeholders advocate for a low-cost designation in their SIS. A more loosely defined designator, based on cost rather than publication rights, was wanted alongside or in combination with the OER label. The limitations and functionalities of each SIS drove solutions for presenting such information in course schedules.

Erie Community College uses badges as SIS course markers in its unique system (see fig. 26.2) to indicate affordable course materials. As Erie's BluePrint notes,

The College has designed a series of courses using instructional materials that are either in the public domain or costs less than \$30. A course listed as AIM (Affordable Instructional Materials) in the comment section of the course schedule designates that the class meets this criteria. (SUNY Erie 2014)

The AIM badge replaced the previous "LCC (Low Cost Course)" course marker as a way to include the OER nature of some of these courses.



*Figure 26.2: Erie Community College's Affordable Instructional Materials (AIM) course badge*

Other SUNY schools, such as Dutchess Community College, exclusively use the term OER in their Banner course attributes. The OER definition adopted by SUNY displays as textbook information for marked sections on the class schedule (see fig. 26.3).

Class Schedule Listing

**Sections Found**  
**INTRODUCTION TO BIOLOGY (OER) - 3015 - BIO 030 - 010**

Open Educational Resources (OER) are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits repurposing by others. The majority of materials in this section are OER. A SUNY OER course/section provides students a cost effective alternative to traditional textbooks.

[Textbook Information](#)

**Associated Term:** Spring 2019  
**Registration Dates:** Oct 29, 2018 to Jan 14, 2019  
**Levels:** Credit  
**Attributes:** Remedial, Study Skills

DCC Main Campus Campus  
 Lecture Schedule Type  
 Traditional Instructional Method  
 3,000 Credits  
[View Catalog Entry](#)

Scheduled Meeting Times				
Type Time	Days Where	Date Range	Schedule Type	Instructors
Class 2:00 pm - 3:50 pm T	Hudson Hall 512	Jan 14, 2019 - May 08, 2019	Lecture	Dinorshan Dhanabala (P)

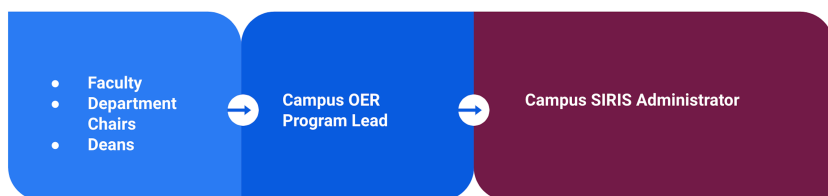
Figure 26.3: Dutchess Community College Banner registration page

GETTING THE DATA RIGHT

As these campus examples illustrate, commonalities can be drawn from the process of marking open and affordable courses. What might be seen as the culmination of a task is really just the beginning of an ongoing conversation. Once a SUNY institution implements SIRIS OER course designators and, potentially, SIS open and affordable course markers, an infrastructure is needed to ensure the process is useful for everyone involved and is maintained effectively on an ongoing basis.

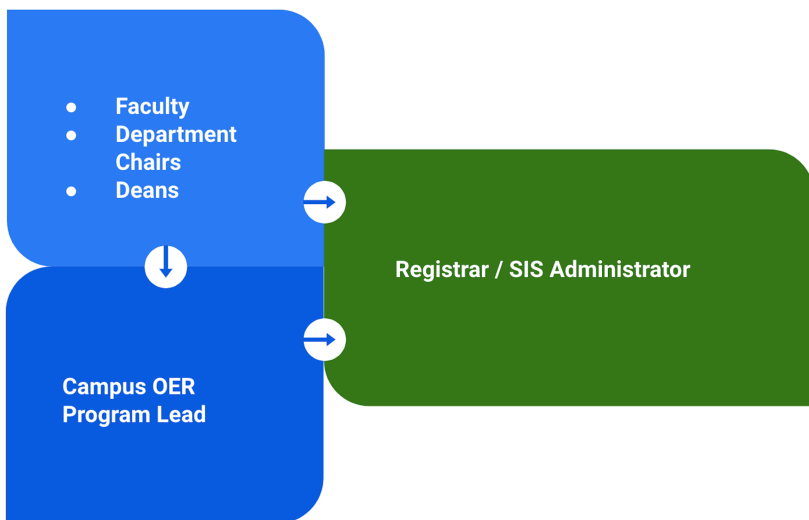
Assigning the SIRIS and SIS registration course designators is a detail-intensive and manual task. For SIRIS OER course designators, faculty must report eligible courses to their institution’s OER program lead, directly or through a department chair or dean. The OER program lead then coordinates with the SIRIS administrator, who is often but not always in the registrar’s office (see fig. 26.4). There isn’t an easy way to carry information over from one semester to another,

because section numbers are uniquely generated each term, and the process is unique enough that registrars haven't yet automated the collection of these data. So the cycle begins anew each semester.



*Figure 26.4: Reporting pathway for SIRIS OER course designators*

Campus schedules can also provide challenges. Where used, SIS open and affordable course markers must be assigned so many months ahead that a course may not yet have a faculty member assigned to it, or an assigned instructor may not yet know what course materials they will require. The potential for last-minute schedule changes causes many campuses to be hesitant in committing to student-facing course markers. SIS open and affordable course markings aren't straightforward for a campus to collect, because, as figure 26.5 shows, there can be multiple reporting pathways involved in moving information from faculty to the Registrar's office.



*Figure 26.5: Reporting pathway for SIS open and affordable course markings*

SIRIS data is harvested later in the semester, generally after the mid-point of the term. This means that a course can be given the OER course designation in SIRIS, even if a SIS open and affordable course marker wasn't applied. However, this puts an extra burden on OER program leadership, to provide multiple check-ins per semester on the reporting data to confirm everything is listed correctly for reporting to system administration.

## **A CLOSER LOOK: TWO CASE STUDIES**

The first SUNY campuses to embrace programmatic-level support of OER forged early paths that have greatly informed ensuing system-wide practices. The following case studies, highlighting two such early adopters, illustrate the balance between the needs of individual campuses and the SUNY system goals for OER programs.

These case studies describe public-facing, SIS course markings.

They do not discuss internal data collection practices using SIRIS.

## TOMPKINS CORTLAND COMMUNITY COLLEGE

In 2011, Tompkins Cortland Community College, commonly known as TC3, became the first SUNY campus to make OER an institutional initiative. It was also the first SUNY campus to create an OER course marker in its SIS.

When the campus OER team, consisting of the vice president and provost of academic affairs, the coordinator of learning technology services, the dean of campus technology, and four faculty members, first proposed the idea to the faculty and broader campus community, the idea was challenged. A number of faculty felt that highlighting certain sections of courses in the SIS catalog was unfair to those who did not use OER. This conversation and the resulting decision-making process served as a precursor to statewide OER marking efforts.

As OER adoptions grew over time at TC3, students became aware that many courses did not require the purchase of textbooks, and sought these courses when building their schedules with advisers. When it became clear that there was a need for some kind of OER indicator in the catalog so that students could easily identify OER sections, the OER team convened and decided to implement an OER course marker. This first appeared in the college's Ellucian PowerCampus SIS catalog in 2013.

### **Establishing the Designation**

When the OER team convened to discuss the best course of action, its first step was to decide how OER sections should be identified in the catalog. The team initially considered terms such as "low cost" and "free." In 2013, the team ultimately decided to use "OER" as the indicator for two reasons: first, the OER



sections would not be free because they would have a \$10 fee affixed to them beginning in Fall 2014; and second, the term OER was specific, simple, and widely recognizable, even to students. Advisers and enrollment specialists helped make students aware of OER on campus, becoming familiar with and supportive of the effort. Anecdotally, students commented positively about OER sections, primarily due to cost savings, and asked other instructors to consider this option.

### **Implementing the Designation**

With the OER designation terminology in hand, the campus OER lead then worked with a senior programmer analyst in the campus technology department to update the information systems. This analyst used a feature of PowerCampus to add an attribute with an OER option to all course sections. Another modification established an OER course fee indicator in the SIS.

Next, the analyst developed a schedule search filter, allowing users to quickly and easily identify all available OER sections. An essential component of this filter is a clickable link to TC3's definition of OER (see fig. 26.6). This definition includes information about purchasing print copies from the college's bookstore. By checking the "Show Only OER Courses" box and clicking Search, users can see only those specific offerings. If left unchecked, all course sections appear when clicking Search, regardless of OER designation status.

**TOMPKINS CORTLAND COMMUNITY COLLEGE | myINFO**

**Home Register Search**

**Course Catalog Section Search**

**Login**

Use your myTC3 Credentials to Login.

User Name

Password

**Login**

**Section Search**

**Basic Search Advanced Search**

Keywords  Course Code

Registration Type ☒ Traditional ☐ Continuing Education ☐ Both

Period  Session

☐ Show Only OER Courses [What is OER?](#)

**Search Clear**

Figure 26.6: Section Search tab showing OER course limiter and What is OER? link to definition

Users who locate an OER course and click on the course title will be alerted to a \$10 OER fee applied to the course (see fig. 26.7). This OER fee is used to sustain campus OER efforts. The “Tuition and Fees” page on the TC3 website describes how these fees are used (see fig. 26.8).

	Principles of Accounting I ACCT101/Lecture/BL1	8/22/2018 - 12/14/2018	2018 Fall 15 Wks	4.00	Fees Applicabl e	OER	WEB 12:00 AM - 12:00 AM; Distance Learning - Web, Distance Learning - Web, Room BBoard	12 of 40
--	---	---------------------------	---------------------	------	------------------------	-----	--	----------

Figure 26.7: Course listing with OER fee notification

**OPEN EDUCATIONAL RESOURCES (OER) FEE**

Some courses may have an OER fee associated with them. This fee is in lieu of a textbook and other required course materials, and covers the cost on any licensing that may be associated with the platforms used for open educational resources. The fee also covers the cost of developing and maintaining appropriate materials to support course curriculum.

Figure 26.8: OER fee description from Tompkins Cortland Community College “Tuition and Fees” webpage

## Culture Shift

Since TC3 first implemented the SIS OER course marker in 2014, hundreds of new OER sections have been introduced and

added to the catalog. Discrepancies sometimes occur in which OER courses do not initially appear in the SIS catalog with the OER course marker. As a measure of the initiative's success with addressing faculty's initial concerns about the designation unfairly promoting OER sections over non-OER sections, instructors are now concerned about exactly the opposite situation: an OER designation being *missing* from their courses. Faculty quickly report these incidents to TC3's technology support team to be remedied.

## FULTON-MONTGOMERY COMMUNITY COLLEGE

In 2017, Fulton-Montgomery Community College (FM) followed TC3's lead in establishing a public-facing OER course marker. The impetus for designating OER course sections at FM came directly from a 2016 FM Board of Trustees Policy (Fulton-Montgomery Community College Board of Trustees 2016) that implemented a \$10 course fee for OER courses. Both the board of trustees and the college administration desired that an explanation of this fee be as transparent as possible, following the explanations other assigned fees, such as science lab and technology fees.

Both TC3 and FM utilize the same SIS, Ellucian's PowerCampus. FM benefited directly from TC3's development of the necessary attributes and coding required to designate OER courses. Tompkins Cortland immediately replied to FM's email requesting the coding for PowerCampus. Code in hand, the entire implementation process for FM took less than an hour.

FM's SIS provides course schedules for both current and upcoming semesters, as seen in figure 26.9. Here, students can view sections that have an OER course marker.

Select Semester from List: Summer 2019 Go Scroll down to view schedule information

**Search:**  
Search Text:   

**Search fields:**  
Select All: ☐  
Course: ☐  
Course Title: ☐  
Instructor: ☒  
Room: ☐  
Notes: ☐  
**Course Delivery Type:**  
All: ☒  
Flex Mode: ☐  
Hybrid: ☐  
Web-Based: ☐

**Filter:**  
Show classes running on:  
All Days: ☐  
Monday: ☐  
Tuesday: ☐  
Wednesday: ☐  
Thursday: ☐  
Friday: ☐  
Saturday: ☐  
Only evening classes: ☐  
Only mod. sem. classes: ☐  
Hide closed classes: ☐

Search Cancel Search

Course syllabi can be found at: <https://fmcc.campusconcourse.com/>

[Print Schedule](#)
[Download Schedule](#)

Course	Type	Sec.	Course Title	Credits	Instructor	Mon	Tue	Wed	Thu	Fri	Sat	Mod. Sem.	Notes	OER	Fees	Status	Text Book Info
HIS101	LEC	WB	<a href="#">World Civilizations I</a>	3	Biel, Anna							05/28/2019 - 08/02/2019	Web-Based Class (100% Online)	Yes	Fees Applicable		<a href="#">View Book Information</a>
HIS103	LEC	X	<a href="#">Western Civilizations I</a>	3	Biel, Anna		9:00 AM - 11:45 AM C119	9:00 AM - 11:45 AM C119	9:00 AM - 11:45 AM C119			05/28/2019 - 06/28/2019		Yes	Fees Applicable		<a href="#">View Book Information</a>

Figure 26.9: Fulton-Montgomery Community College OER course markings in course schedule

This configuration, however, does not give students, advisers, and other academic support personnel the ability to filter for courses with an OER designation. Visibility of information about what OER is and how course fees are relevant is also reduced. Savvy students clicking on “Yes” in the OER column within the course schedule receive this explanation:

Open Educational Resources (OER) are teaching and learning materials that may be used and reused, at low cost or without charge. OER often have a Creative Commons or GNU license that states specifically how the material may be used, reused, adapted and shared. Please contact the bookstore if you wish to purchase a printed copy of an open textbook.

Without cross referencing either the college’s tuition and fee schedule or FM’s catalog, a full understanding of the \$10 OER course fee is not possible.

## **OER Course Designation Successes**

Marking OER courses allows for FM to report OER related data (e.g., enrollment, retention, grades) to SUNY and to receive targeted analysis of that data for better understanding of the impact of OER beyond cost savings. SUNY began formally gathering data for analysis in Fall 2018.

The most apparent success on the ground at FM from marking OER course sections, however, is the ability it provides academic advisers, counselors, librarians and other professionals on campus to more easily assist students who have self-disclosed either financial difficulties in paying for traditional course materials or who have taken one OER course and are seeking a similar experience. FM uses an assigned academic adviser model, where students have direct access to guidance on course choices; they also regularly access DegreeWorks, which offers students a dashboard detailing the most appropriate courses for their stated educational objective. FM students, however, tend to choose courses based on two concerns of greater weight than the cost of course material: day(s) of week course is offered and time of day course is offered. As a rural community college serving an economically challenged area, FM must consider the priorities of students setting their schedules to accommodate transportation, employment, and child care. Like many community college students balancing work-life-school loads, FM students choose course schedules best suited to work around their most immediate needs, regardless of OER usage. FM has not yet seen the trend reported by other SUNY schools of OER sections filling more quickly than other sections. It will be interesting to see if there is a shift in this arena as the use of OER continues to grow at FM in courses across the curriculum.

## **OER Course Designation Challenges**

Seeking to utilize existing workflows, FM's administration highlighted the existing course materials request form as the

easiest route for faculty to indicate OER usage each semester. The use of an already existing form (see fig. 26.10) reinforced faculty's decision to use OER as being supported and part of the culture of the college.

The image shows a Google Form titled "Fall 2019 Course Materials Request Form". The form is set against a blue header and a light purple background. The title is in a large, bold, black font. Below the title, a subtitle in a smaller font reads: "Use this form to request textbooks, open educational resources, and supplies for upcoming course assignments". A red asterisk followed by the word "Required" is placed above the first two fields. The first field is "Instructor Name", with a dropdown menu currently showing "Choose". The second field is "Course Number", also with a dropdown menu showing "Choose". The third field is "Section(s)", which is a text input field with the placeholder text "Your answer". Below this is a question: "Is this an Open Educational Resource?", marked as required with a red asterisk. It has a dropdown menu showing "Choose". At the bottom left is a grey button labeled "NEXT". To the right of the button is a progress bar, which is a thin teal line followed by a grey bar, and the text "Page 1 of 9". At the very bottom, in small grey text, it says "Never submit passwords through Google Forms."

Figure 26.10: Fulton-Montgomery Community College course materials request form

Faculty selecting OER when completing the form triggers a designation of that course section as OER for the registrar, college bookstore, and the SIS. Historically, this form had a low

use rate (for all course material selections) by faculty. This potentially means that the online course schedule is released without every OER course being appropriately designated. The process of obtaining information from faculty regarding OER use and then moving that information to its appropriate online location remains a very time-consuming and labor-intensive process. Given its size (1,650 full-time equivalent students in Fall 2018), this is not an insurmountable problem for FM. At an even slightly larger institution, however, this manual process could very well overwhelm OER efforts and hinder progress.

## **RECOMMENDATIONS**

1. Decisions to mark open and affordable course sections for public or student-facing viewing during the course registration process should always be a campus-based decision involving the appropriate level of input from all stakeholders: administration, faculty, staff, shared governance bodies, and labor unions.
2. Inasmuch as OER champions drive the adoption and creation of OER on SUNY campuses, the burden to track, record, and report all OER sections every semester should not fall to one person.
3. Consideration should be given to other existing systems in place requiring unique course attributes (e.g., modality, alternative schedules). Campuses should seek to replicate those processes to reduce manual labor in marking OER course sections.
4. Practices and motivations for OER course marking might change over time, given the evolution of local OER programming efforts. These practices should be evaluated periodically to determine if any changes are needed.





## APPENDIX A: PROJECT LINKS

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### MARKING PROJECT RESOURCES

*Marking* Project Home <https://bit.ly/3a03JG1>

*Marking* Project Discussion Board <https://bit.ly/2T95ABB>

“Marking *Marking*” by Donna Langille  
[https://press.rebus.community/rebuscommunityreports/  
chapter/making-marking/](https://press.rebus.community/rebuscommunityreports/chapter/making-marking/)

### MAVS OPEN PRESS RESOURCES

Open Education at UTA [https://libraries.uta.edu/about/dept/  
oer](https://libraries.uta.edu/about/dept/oer)

Mavs Open Press OER Catalog <https://uta.pressbooks.pub>

OER Adoption Form <https://bit.ly/33xDiI9>



## APPENDIX B: OER BENEFITS

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For instructors, **open educational resources (OER)** have the following benefits:

- Assurance that every student has immediate and unlimited access to course content
- Choice of technology partners rather than being locked into a particular platform or system
- Ability to use, edit, and adapt existing materials without needing to acquire copyright permission
- Availability in a variety of formats (e.g., HTML, PDF, ePUB) or ability to produce the resource in alternate formats
- Ownership of the content forever
- Flexibility in when and whether to move to a new edition

For students, OER offer cost savings as well as the following benefits:

- Access to course content in appropriate formats for various devices and situations, including the option to download the text for when internet access is not available
- Ability to share the content on social networks and public forums, including blended learning environments

- Instant, unlimited, and permanent access to content,
  - eliminating the need to buy content multiple times or for a longer period of time in order to use the content for multiple semesters;
  - enabling use of the content as a reference for more advanced courses (e.g., using an introductory statistics book as a reference for a research methods course);
  - easing study for higher education entrance and certification exams (e.g., GRE, GMAT, MCAT, CPA); and
  - providing access to content for lifelong learning and career changes.
- Ability to print all of the course material when convenient

For institutions, OER offer the following benefits:

- Broader student access to course materials, which may result in increased retention and degree progression (Fischer et al. 2015) and/or lower failing and withdrawal rates (Colvard, Watson, and Park 2018)
- Increased impact and visibility for instructors creating and sharing OER, potentially impacting course development at other institutions
- Enhanced pedagogy, because instructors can adapt course materials to their learning objectives instead of making their course content “fit” an established textbook
- Positive public relations and an opportunity to showcase efforts to reduce student costs

## ABBREVIATIONS

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This section provides a list of abbreviations used within *Marking Open and Affordable Courses*. For terms with asterisks, full definitions are provided in the Glossary.

**ATD\***: Achieving the Dream

**CSRF**: Course Section Reporting Form

**FTE**: Full-time equivalent

**GAO**: Government Accountability Office

**HEOA\***: Higher Education Opportunity Act

**IT**: Information technology

**LCB**: Low Cost Books

**LMS**: Learning management system

**OER\***: Open educational resources

**SGA**: Student government association

**SIS\***: Student information system

**SWOT**: Strengths, weaknesses, opportunities, and threats

**TAT**: Textbook Affordability Team

**ZCB:** Zero Cost Books

**ZDG\*:** Z-Degree

**ZTC\*:** Zero textbook cost

## GLOSSARY

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### **Achieving the Dream**

An organization that assists community colleges with sustainable institutional transformation to increase student success, especially of low-income students and students of color. One initiative for their network of community colleges focuses on the increased adoption of OER.

### **Affordable Educational Resources**

Also called Affordable Course Content or Affordable Course Materials: course materials that are significantly more affordable for students than traditional commercial textbooks and other course materials. Generally each institution defines what “affordable” means in their context, with costs ranging from \$25 to \$50 and \$40 being the average threshold for the “affordable” designation.

### **Course Catalog**

Also called Course Timetable or Course Schedule Platform: a college or university’s exhaustive listing of courses and programs currently and historically offered, including course titles and descriptions; course catalogs may also contain information about an institution’s policies and procedures.

### **Course Markings**

Also called attributes, designations, tags, flags, labels:

specific, searchable attributes or designations that are applied to courses, allowing students to quickly identify important information to aid in their decision making and allow them to efficiently plan their academic careers. Course markings may include letters, numbers, graphic symbols, or colors and can designate any information about a course, including service learning status, additional costs, course sequencing requirements, and whether the course fulfills specific general education requirements.

### **Course Throughput Rate**

Measures the effects of a combination of student responses to courses, which include dropping a course, withdrawing from a course, and completing the course with a C or better final grade (Hilton et al. 2016). Researchers use the aggregate course throughput rate to compare student outcomes in course sections using traditional learning materials versus sections using open and affordable materials.

### **Educators**

Also called instructors, teachers, faculty: the term used throughout the book to refer to the variety of teaching staff in higher education. This includes anyone that might teach a credit-bearing course, including faculty (both tenure and non-tenure track), adjuncts, graduate students, staff, and librarians.

### **Enrollment Intensity**

Distinguishes between students who enroll as full-time and part-time based on numbers of credits.

### **Higher Education Opportunity Act**

2008 law that reauthorized the Higher Education Act of 1965 and that governs the nation's college and university policies, including course material costs and price transparency.



**In-House Software**

Software that has been developed in-house by a particular institution to meet specific, local requirements. Home-grown software is often highly customized and maintained by the institution's local developers.

**Inclusive Access**

A marketing term used to describe an agreement between textbook publishers and professors/institutions that allows all students enrolled in a specific course to be automatically charged for course materials through institutional fees. In the United States, organizations are legally required to provide students with options to opt-out of automatic purchasing programs. Multiple lawsuits have been filed against publishers and bookstores over such programs, including a class-action lawsuit filed in April 2020 by FeganScott on behalf of college students against Cengage Learning, McGraw Hill, Pearson Education, Follett Higher Education Group, and Barnes & Noble College Bookseller.

**Learning Analytics**

The act of gathering and analyzing large amounts of students, data via technology with the goal of improving student success and retention. Learning analytics can be gathered through online learning platforms, learning management systems, or other platforms and contexts. With the growing interest and use of learning analytics in higher education, issues of privacy, consent, and ethics are paramount.

**Neoliberalism**

An economic system favoring free market capitalism. Since the 1970s, state governments and higher education institutions have increasingly shifted the burden of tuition costs to students and outsourced institutional services to third party vendors (e.g., technology infrastructure such as

learning management systems, dining services, and university bookstores). Critics charge that by favoring free market economics, neoliberalism impedes diversity, equity, and inclusion efforts and limits access to open and affordable education.

### **Open Educational Resources (OER)**

Free teaching and learning materials that are licensed to allow for revision and reuse.

### **Open Source Software**

Software that has been shared freely under an open license so that institutions can download, host, and customize the software for their own needs. Adoption of open source software often requires in-house technical expertise.

### **Openwashing**

The use of the term “open” when the materials do not meet all characteristics of open (free + open licensing to allow for unlimited reuse, retention, distribution, and editing). Often used to refer to commercial products.

### **Openwrapping**

Similar to openwashing, refers to a practice in which open materials are “wrapped” in non-open products, often referred to by commercial companies as value-added features. The company refers to the whole product as “open”, but the added features restrict users' access to the open content.

### **Schedule of Classes**

Also called Course Schedule or Schedule of Courses: a college or university's listing of courses to be offered each semester or quarter, which includes details on class time, prerequisites, instructor of record, and other information; it is updated for each academic period.

**Self-Service Client**

Also called self-service portal: a web-based application that allows users to complete key actions firsthand, such as adding fields, adding tags, or changing the order of fields.

**Student Information System (SIS)**

Also called Registration System, Course Timetable Software or Course Schedule Platform: a web-based application designed to aggregate key information about students, including demographic information, contact information, registration status, degree progression, grades, and other information. Some SISs assist students with enrollment, financial aid processes, and final payment for courses.

**Title IV**

Federal program which guides and authorizes financial assistance for students at higher education institutions.

**Z-Degree**

Also called Zed Cred: a degree, certificate, or curriculum path that has completely adopted free or zero-cost course materials so that as students progress through the degree they do not pay for course materials. All courses within the degree program must commit to zero-costs in order for the degree to be designated a Z-Degree.

**Zero Textbook Cost (ZTC)**

Courses that do not require students to spend money for textbooks. May be achieved through the use of OER, library-licensed content, or other free resources.

**Zero Textbook Course (ZTC)**

Courses that do not require students to spend money for textbooks; the courses have “zero textbook costs.” May be achieved through the use of OER, library-licensed content, or other free resources.

**Zx23**

Grant through Virginia Community College system supporting the creation of Z-Degrees at all 23 VCCS institutions in the system.

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Breeman Ainsworth is Head of the Humanities Department at Oklahoma State University-Oklahoma City. He has more than 10 years of experience teaching in higher education and has served as a department head for five. His first experience with open educational resources (OER) came as a student, and the experience shaped his expectations and hopes for future college courses. He serves in a leadership role in broadening the local use of OER. He has been privileged to work with a supportive informational technology staff and instructor and brings OER to many of his own and his department's courses. He cooperated with administration to provide compensation packages to professors to encourage OER implementation.

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Nicole Allen is the Director of Open Education at SPARC. A decade and a half ago, she was an undergraduate student frustrated with the cost of textbooks. Today, she is an internationally recognized policy expert, community organizer, and speaker on open education, educational technology, and higher education reform. Motivated by the belief that everyone, everywhere should be able to participate in shaping human knowledge, Nicole's work includes advocating for effective open policies, supporting open education programming for SPARC's

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Alexis Clifton is a long-time open education advocate. Building from her first experiences using OER in her English Composition courses at Tacoma Community College in Tacoma, Washington, she went on to participate in the Kaleidoscope Open Course Initiative and later served as a Faculty Success lead and course developer with Lumen Learning. She acted as the founding executive director of SUNY OER Services, serving all 64 institutions of the State University of New York in the support and development of local campus OER initiatives. She is the vice president of the board of directors for Open Education Global. As a senior instructional support specialist at SUNY Geneseo in Geneseo, New York, Alexis specializes in open, accessible, and inclusive course design to expand educational opportunities for everyone.

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## **HEATHER WHITE**

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