

# The Impact of OER Initiatives on Faculty Selection of Classroom Materials

Tanya Spilovoy, Jeff Seaman, and Nate Ralph



Bay View Analytics

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2020

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# ACKNOWLEDGMENTS

This project uses data collected for a project supported by the William and Flora Hewlett Foundation to address new questions about OER awareness and use. The Hewlett Foundation was instrumental in helping to frame the initial project, and provided support for data collection, analysis, and report creation.

Bay View Analytics, formerly known as Babson Survey Research, was founded at Babson College in 2004. When the researchers left their teaching roles at Babson, the college initiated an arrangement whereby the brand would continue for future reports. Now, over a hundred reports and over a million downloads later, it is time to redefine that relationship as our research focus evolves. We offer special thanks to Babson College, as they have been a tremendous partner.

The richness of the responses from thousands of faculty and department chairpersons allows for this secondary analysis. We thank all who took the time to provide us with such detailed and thoughtful feedback.

Since 2017, and with the leadership of its Director for Open Policy, the WICHE Cooperative for Educational Technologies (WCET) has advised the adoption of open educational policy and practice in systems, states, and compact regions. In 2018, WCET collaborated with the Midwest Higher Education Compact (MHEC) to host a multi-state midwestern regional summit and launch an initiative dedicated to open educational resources. Due to the success of that model, the four regional higher education compacts — the Midwestern Higher Education Compact (MHEC), the New England Board of Higher Education (NEBHE), the Southern Regional Education Board (SREB), and the Western Interstate Commission for Higher Education (WICHE) — joined efforts to explore a partnership to scale open educational resources across the U.S.

The authors wish to thank the presidents of the four regional compacts who lead and encourage collaboration among states and compact regions— Susan Heegaard (MHEC), Michael K. Thomas (NEBHE), Stephen L. Pruitt (SREB), and Demarée Michelau (WICHE). We also extend sincere gratitude to the regional compact staff who worked together to bring this collaboration and OER program implementation to fruition—Jenny Parks (MHEC), Rachael Stachowiak, Lindsey Gumb, and Stafford Peat (NEBHE), Wanda Barker and Tiffany Harrison (SREB), Russel Poulin, Patrick Lane, Liliana Diaz, and Christina Sedney (WICHE), and Cheryl Blanco (SREB, retired). We also wish to thank Angela DeBarger (William and Flora Hewlett Foundation) for reading and providing comments. The compacts’ collective goal to scale the use of high-quality OER, enable substantial research efforts, and develop OER solutions that promote equity, prompted this study and for that we are grateful.

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# EXECUTIVE SUMMARY

The adoption of Open Educational Resources (OER) is on the rise, driven in part by increasing awareness of OER. But while faculty and institutions have shown increasing awareness and acceptance of OER, many remain unfamiliar with what they are, or how to utilize them.

- Faculty who are aware of one or more OER initiatives are much more likely to be adopters of OER. This holds true for both faculty teaching introductory-level courses and the general population of faculty.
- When implemented at the institutional level, OER initiatives result in a measurable rise in the number of faculty who are aware of OER.
- Faculty who are aware of OER are much more likely to adopt OER as required course materials; those who have yet to adopt OER are much more likely to do so in the future.
- The impact of awareness of OER initiatives on adoption remains consistent across types of institutions (two- and four-year), the level of course being taught, and across regional compacts in the U.S.

## Regional State Higher Education Compacts

This report examines activities at the state and regional level in the U.S., with a focus on regional higher education compacts. According to Wikipedia, an Interstate Compact is:

*In the United States of America, an interstate compact is an agreement between two or more states. Article I, Section 10 of the United States Constitution provides that "No State shall, without the Consent of Congress... enter into any Agreement or Compact with another State." Consent can be obtained in one of three ways. First, there can be a model compact and Congress can grant automatic approval for any state wishing to join it, such as the Driver License Compact. Second, states can submit a compact to Congress prior to entering into the compact. Third, states can agree to a compact then submit it to Congress for approval, which, if it does so, causes it to come into effect. Not all compacts between states require explicit Congressional approval – the Supreme Court ruled in Virginia v. Tennessee that only those agreements which would increase the power of states at the expense of the federal government required it.<sup>1</sup>*

There are four regional higher education compacts: the Midwestern Higher Education Compact (MHEC), the New England Board of Higher Education (NEBHE), the Southern Regional Education Board (SREB), and the Western Interstate Commission for Higher Education (WICHE). They share a common interest in assisting and promoting the adoption and scaling of open education resources. In collaboration and individually, compacts have effectively sustained higher education programs. Governors, state legislators, system heads, state higher education and K-12 officers, educators, businesses, and lay people serve on regional compact governing boards. States have made significant investments in their compacts since they were established — SREB in 1948, WICHE in 1953, NEBHE in 1955, and MHEC in 1991 — and rely on the compacts to be a non-partisan partner in effective policy, practice, and research. Since their inception, the compacts have been valued resources for decision makers, institutional leaders, researchers, and practitioners.

### **Midwestern Higher Education Compact (MHEC)**

The Midwestern Higher Education Compact consists of the following member states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.<sup>2</sup> The MHEC serves all public and private (not-for-profit) postsecondary institutions within its member states. In some cases, K-12 districts and schools, or city, state, local government and political subdivisions may be eligible to participate in some of MHEC's technology contracts.

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<sup>1</sup> [https://en.wikipedia.org/wiki/Interstate\\_compact](https://en.wikipedia.org/wiki/Interstate_compact)

<sup>2</sup> <https://www.mhec.org/about/membership>

### **New England Board of Higher Education (NEBHE)**

Founded in 1955, the New England Board of Higher Education engages policymakers in the six New England States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. NEBHE develops collaborative, multi-state programs to expand resource efficiency, policy innovation and cross-state alignment. It works in partnership with governors and their education advisors, legislators, K-12 and higher education commissioners, leaders of public and independent colleges and universities and business and industry.

### **Southern Regional Education Board (SREB)**

The Southern Regional Education Board works with 16 member states to improve public education at every level, from pre-K through Ph.D. The SREB's member states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.<sup>3</sup> A nonprofit, nonpartisan organization headquartered in Atlanta, SREB's work is funded by member appropriations and by grants and contracts from foundations and local, state and federal agencies.

### **Western Interstate Commission for Higher Education (WICHE)**

The Western Interstate Commission for Higher Education is a regional organization created by the Western Regional Education Compact and adopted in the 1950s by Western states. WICHE was created to facilitate resource sharing among the higher education systems of the West. The member states include 15 Western states, and the U.S. Pacific Territories and Freely Associated States: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI).<sup>4</sup>

### **Changes for OER regional analysis**

Analysis for this report has been broken into compact regions. The regional compacts serve member states, but there are two states that are members of two regional compacts, and three states that are not members of any compact. North Dakota and South Dakota are members of both WICHE and MHEC; for the purpose of this analysis, ND and SD were treated as members of only MHEC, to ensure that their results are not double counted.

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<sup>3</sup> <https://www.sreb.org/about>

<sup>4</sup> <https://www.wiche.edu/states>



Some states are associated with a regional compact for the purpose of joining the State Authorization Reciprocity Agreement (SARA); New York and New Jersey are not members of any regional compact, but are part of the NEBHE OER Advisory Committee. Pennsylvania, the District of Columbia, the US Virgin Islands and Puerto Rico are affiliated with SREB for the purpose of SARA. Through participation in one or more of the four regional compacts, potentially all 50 states, the District of Columbia, territories, and freely associated states may participate in regional efforts to support the scaling and adoption of open educational resources.

Regional compacts are focused on states. States and systems (generally speaking) have oversight over public institutions. Because this report serves to examine the relationship between high-level OER initiatives and faculty adoptions, only data from public institutions were collected. Private institutions may also have robust OER initiatives and faculty participation, but they were not included in the results of this study.

# STUDY RESULTS

## Open Educational Resources

This study explores the particular class of educational materials classified as Open Educational Resources (OER). The William and Flora Hewlett Foundation defines OER as follows:

*OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.<sup>5</sup>*

This research focuses on the materials faculty members select to use in the courses they are teaching. The most common type of material is the required textbook: faculty members typically choose one or more books that all students are required to use throughout the course. Faculty also employ a wide range of other materials — some optional, others required for all students. This study focuses only on the required materials, using the following definition:

*Items listed in the course syllabus as required for all students, either acquired on their own or provided to all students through a materials fee; examples include printed or digital textbooks, other course-complete printed (course pack) or digital materials, or materials such as laboratory supplies.*

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<sup>5</sup> <http://www.hewlett.org/programs/education-program/open-educational-resources>.

## Introduction

Within the U.S., individual institutions, college and university systems, states, and multi-state compact regions have launched OER efforts. Many of these efforts have been influenced by the philanthropic strategy of the William and Flora Hewlett Foundation. This report aims to examine the effectiveness of large-scale OER initiatives on faculty awareness and adoption of OER. The ultimate goal is to gain an understanding of how large-scale OER efforts influence faculty decisions, and ultimately have a positive impact on students. As the regional compacts continue to collaborate around issues of OER policy and practice, this report serves as an initial assessment and a foundation by which to measure impact of OER leadership at compacts over time.

The regional compacts' shared OER efforts aim to reach the following goals:

- Enhance state, system, and institutional efforts to integrate high-quality open educational resources into teaching and learning practices to increase student success metrics for all students.
- Assist key state policymakers and state- and institution-level higher education leaders to understand and consider the potential benefits and challenges of implementing OER at scale when developing policies and practices.
- The availability and use of rigorous research will focus on best practices in policy and practice, as well as the impact and outcomes of OER activities, with a particular focus on the role of OER in closing equity, postsecondary attainment, and skills gaps for all students.
- Equity will be broadly recognized as an essential characteristic of, and embedded in, sound OER policy, practice, and research, and the compacts will leverage the use of OER to promote their equity goals and those of their members.

Some context on the evolution of the growth of an awareness of Open Educational Resources (OER) will be useful for understanding the importance of OER initiatives. The adoption of OER is intrinsically linked to awareness of what OER are, and what benefits they might provide to students, educators and their institutions. OER initiatives at individual institutions and college and university systems have shown to be effective in increasing OER adoption.<sup>6</sup> Awareness of OER has shown steady growth for a number of years, and OER adoption as required course materials has grown year-over-year. Despite this, neither awareness nor adoption of OER has yet to reach a majority of faculty members.

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<sup>6</sup> <https://www.insidehighered.com/digital-learning/article/2018/11/16/north-dakota-audit-reports-significant-cost-savings-after-oer>

Previous studies have shown substantial changes in the selection process for course materials over the past five years. Faculty are becoming more accepting of digital materials, and the range of digital options has substantially expanded. Many more faculty now factor the cost to the student into their material selection process. Awareness of the impact of cost on students has risen substantially, reflecting the rising cost of materials and the emergence of lower-cost alternatives. All of these factors are leading to increased OER awareness and adoption.

However, academic publishers are feeling the pressure to address cost concerns and are rapidly changing their marketing strategies, embracing digital materials and new "inclusive access" approaches.

Increased adoption of OER is hampered by the fact that the majority of faculty are unaware that it even exists. Among the faculty that are aware of OER, the time and effort required to find OER materials appropriate to their needs remains far greater than that required to select commercial alternatives. This study examines the role of OER initiatives as one possible approach to increase faculty awareness and adoption of OER.

## National OER Awareness

*Awareness of OER shows slow but steady growth.*

Before examining the pattern of Open Educational Resources (OER) awareness and use among U.S. public higher education institutions, it is important to understand the larger national picture. Measuring faculty awareness of OER requires a measure of both the term itself and an understanding of the ideas of open licensing and the ability to reuse and remix content, which are central to the concept of OER.<sup>7</sup>

An essential aspect of the examination of the use of educational resources is the licensing status of such materials: who owns the rights to use and distribute the material, and does the faculty member have the right to modify, reuse, or redistribute said content? The legal mechanism that faculty are most familiar with is that of copyright. The U.S. Copyright Office defines copyright as:

*A form of protection provided by the laws of the United States for "original works of authorship", including literary, dramatic, musical, architectural, cartographic, choreographic, pantomimic, pictorial, graphic, sculptural, and audiovisual creations. "Copyright" literally means the right to copy but has come to mean that body of exclusive rights granted by law to copyright owners for protection of their work. ... Copyright covers both published and unpublished works.<sup>8</sup>*

Not all material is copyrighted. Some content may be ineligible for copyright, copyrights may have expired, or authors may have dedicated their content to the public domain (e.g., using Creative Commons public domain dedication<sup>9</sup>).

*Public domain is a designation for content that is not protected by any copyright law or other restriction and may be freely copied, shared, altered and republished by anyone. The designation means, essentially, that the content belongs to the community at large.<sup>10</sup>*

Materials can also be released under a Creative Commons license, which is not an alternative to copyright, but rather a modification of the traditional copyright license that grants some rights to the public.

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<sup>7</sup> David Wiley, The Access Compromise and the 5<sup>th</sup> R, Iterating Toward Openness, <http://opencontent.org/blog/archives/3221>

<sup>8</sup> <http://www.copyright.gov/help/faq/definitions.html>

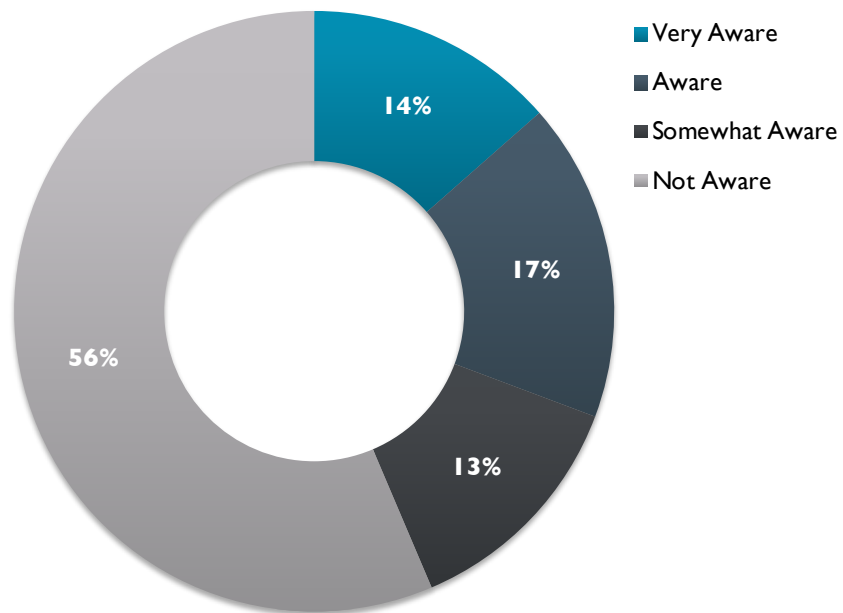
<sup>9</sup> <https://creativecommons.org/publicdomain/zero/1.0/>

<sup>10</sup> <http://whatis.techtarget.com/definition/public-domain>

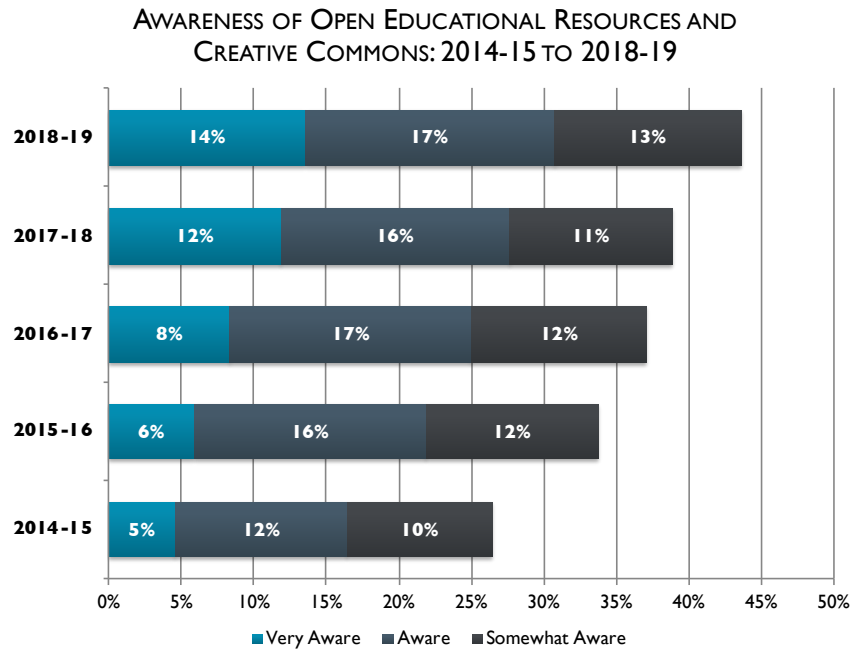
The level of Creative Commons awareness is particularly important in the context of measuring a complete understanding of open educational resources. Combining responses for awareness of OER and awareness of its legal permissions, specifically Creative Commons, provides an estimate of the level of understanding of OER and the concepts underpinning it.

Using the OER awareness metric, 14% of all faculty are classified as "Very Aware," 17% as "Aware," and 13% as "Somewhat Aware." The overall proportion classified into any of the "Aware" categories is 44%.

### AWARENESS OF OPEN EDUCATIONAL RESOURCES AND CREATIVE COMMONS: 2018-19



The level of combined awareness of OER and Creative Commons continues to grow each year. Faculty reporting that they were "Very Aware" more than doubled, from 5% in 2014-15 to 14% in 2018-19. Likewise, those saying they were "Aware" grew from 12% to 17% over the same period. The total percentage of faculty claiming some degree of awareness using this stricter definition stood at 26% in 2014-15, rose to 34% in 2015-16, 37% in 2016-17, 39% in 2017-18, and now stands at 44% for 2018-19.

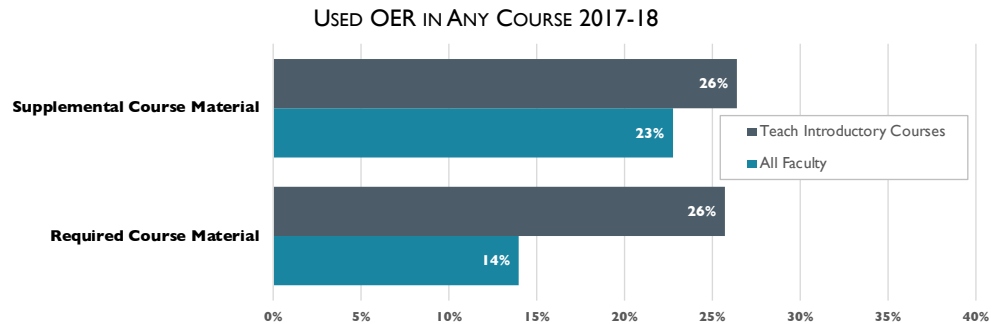


OER awareness shows steady year-over-year growth for the past five years, with increasing numbers of faculty reporting higher levels of awareness every year. The news is not all positive however, as substantial numbers of faculty remain either unaware or only "Somewhat Aware" of OER. At the current rate of increase, it would take another five years before a majority of teaching faculty will claim to be either "Very Aware" or "Aware" of OER and its licensing.

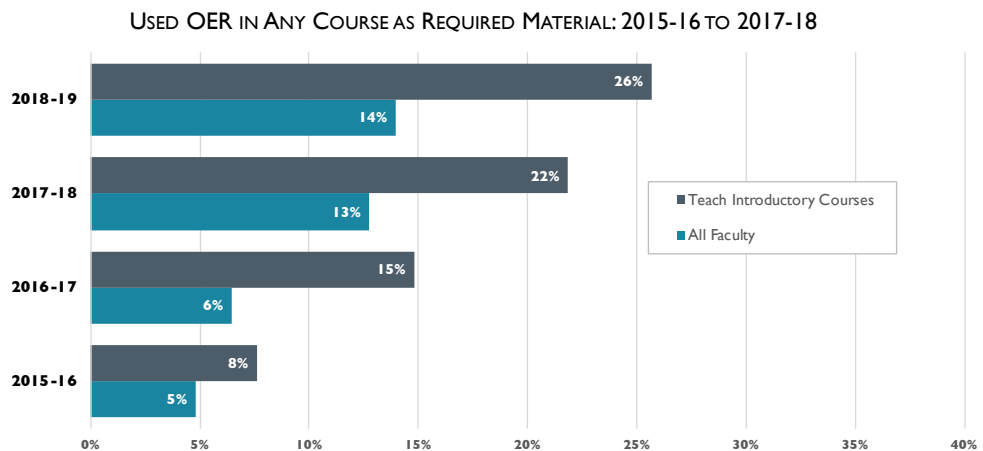
## National OER Use

*Use of OER continues to grow, but remains only a small portion of the market.*

Just over one-quarter (26%) of a national sample of faculty who teach large-enrollment introductory courses report that they are using OER in some fashion, with equal numbers saying they use OER as supplemental and required materials. The rates are lower across faculty teaching courses at all levels, with 14% reporting using OER as required course materials in at least one of their courses.



The 2018-19 results reflect continued year-to-year growth of OER adoption. The number of all faculty using OER as required materials has nearly tripled, rising from 5% in 2015-16 to 14% in 2018-19. The growth among faculty teaching introductory courses is equally impressive, growing from 8% to 26% in the same period. While the growth in OER use has been steady, only a small minority of faculty have adopted OER as required material in any of their courses.





## OER Initiatives

### Leadership

OER initiatives at institutions, systems and states vary in source of leadership, scope, duration, funding, and focus.<sup>11</sup> The characteristics of OER initiatives are dependent upon the needs and goals of stakeholders. While no two OER Initiatives are exactly alike, a common goal is a focus on reducing the cost of learning materials, enabling faculty to customize the curriculum, and increasing educational equity and access for students. Open Education Leadership programs — such as the SPARC Open Education Leadership Program,<sup>12</sup> the Open Textbook Library’s faculty workshops,<sup>13</sup> Creative Commons certificate,<sup>14</sup> and “train the trainer” models of mentorship and development across various organizations in the OER and higher education landscape — have provided development and leadership opportunities for people interested in leading an OER initiative.

**Students:** Leadership can originate from students or student organizations; students are the main beneficiaries of the benefits OER affords.

**Libraries:** Librarians are often actively involved in OER efforts, as curating, managing, and disseminating resources are an extensive part of their responsibilities. Libraries are frequently the center of OER initiatives on campuses.

**Faculty:** Faculty are also OER champions due to their ownership of the curriculum, teaching and learning activities, and subject matter expertise. Faculty have the ability to create, revise, and distribute OER for the purposes of teaching and learning; ensuring academic freedom is crucial to empowering faculty who lead OER initiatives.

**Administrators:** OER initiatives can also be led by administrators who are looking to reduce cost, increase student access, engagement, and completion goals.

**Bookstores:** Bookstores are often partners, as they work closely with faculty and administration on selecting and acquiring textbooks.

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<sup>11</sup> <https://sparcopen.org/our-work/oer-state-policy-playbook/>

<sup>12</sup> <https://sparcopen.org/our-work/open-education-leadership-program/>

<sup>13</sup> <https://open.umn.edu/opentextbooks>

<sup>14</sup> <https://certificates.creativecommons.org/>

## OER Councils, Task Forces, State Action Teams, and Advisory Committees

Regional compacts, states, systems, and even individual institutions have convened OER task forces, councils, state action teams, and/or advisory committees to develop programs, make recommendations, conduct research, administer grant funds, or define objectives. OER Initiatives are commonly led by groups with diverse membership and the common goal of leveraging OER for the benefit of students.

The four regional compacts collectively established a leadership team comprised of policy staff from each of the regional compacts to guide their joint work. Individual compacts have also organized groups. NEBHE established an OER Advisory Council with broad representation from New England member states, to inform efforts at the compact level. MHEC organized twelve separate state action teams to lead efforts in MHEC member states. State-level councils include the Colorado Department of Higher Education OER Council, the North Dakota OER Advisory Committee, the Rhode Island Open Textbook Initiative Steering Committee, and the Massachusetts OER Advisory Council.

## OER Grant Programs

OER grant programs are often conducted by institutions or system entities to support faculty adoptions, customization, or creation of OER materials. Funding for grant programs can be legislatively appropriated by states or provided by existing funds. States with OER grant programs include Maryland, Massachusetts, North Dakota, Wyoming, and Colorado. The return on original state investments can be high, attracting policymakers and higher education leaders to adopt this strategy. For example, the state of North Dakota appropriated \$110,000 in 2015 to support OER across the state. The system office used the funds to provide faculty grants. In 2018, an official state audit of the program determined students saved between 10 and 20 times the original investment in just two years.

In 2002, the William and Flora Hewlett Foundation began investing in open educational resources with the goal of improving access to education, personalized instruction, and improving learning for underserved students. In its 2015 Strategy Memo,<sup>15</sup> the Foundation announced a focus on funding in two pathways: Open textbooks for the most-enrolled college courses, and Zero textbook cost (ZTC) degrees in community colleges within the United States. Other philanthropic organizations, such as the Bill and Melinda Gates Foundation and the Michelson 20 MM Foundation, also made key investments in OER infrastructure, technology, and programming. This effort resulted in an increase in the number of open textbooks for foundational college courses, and an increase in the use of these textbooks in courses with the highest

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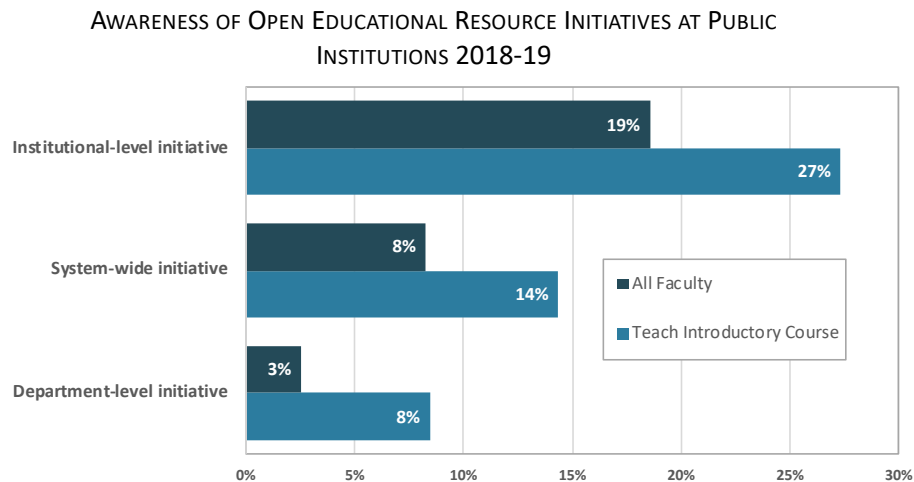
<sup>15</sup> <https://hewlett.org/wp-content/uploads/2017/02/OER-strategy-memo.pdf>

enrollment numbers. Efforts were focused on “building the supply of easily discoverable, high-quality open textbooks, providing technical assistance for faculty; and promoting open materials to faculty and librarians.” Results of that effort are evident in the following data.

## OER Initiatives and Awareness

*Faculty members who know about an OER initiative report much higher awareness of OER than those who are unaware on an OER initiative.*

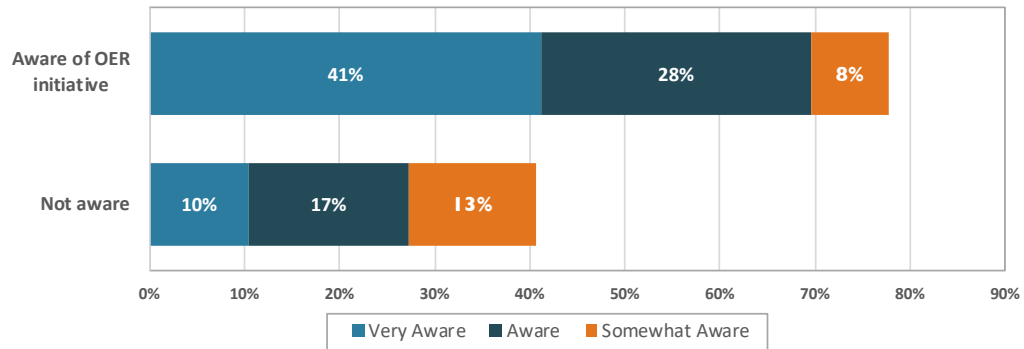
Faculty at public institutions were asked if they were aware of OER, and if they were aware of any OER initiatives at their institution. Over a quarter of faculty teaching introductory courses report that they are aware of an OER initiative at their institution.



The level of awareness of such an initiative is lower among the overall population of faculty, perhaps because the initiatives target faculty teaching larger courses where the cost benefits to students would be greater. Smaller numbers have heard of initiatives that span an entire system, with the smallest percentage aware of a departmental-level initiative.

The results also show that faculty who report they are aware of an OER initiative at their institution show much higher levels of awareness of OER than those who are not aware of such initiatives.

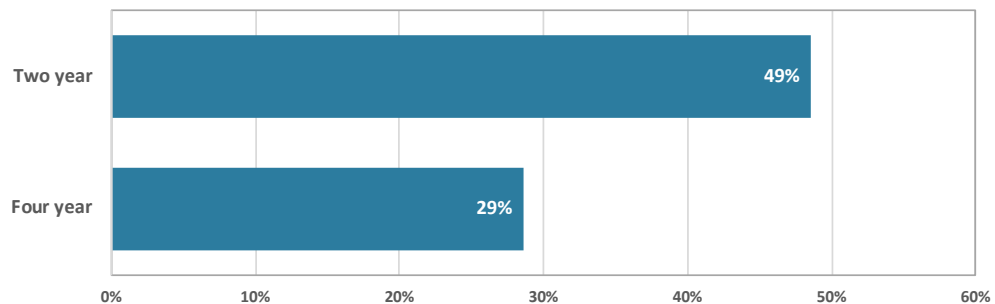
#### AWARENESS OF OPEN EDUCATIONAL RESOURCES AT PUBLIC INSTITUTIONS 2018-19



Of respondents who are aware of OER initiatives, 41% state they are “Very Aware” of OER, 28% state they are “Aware,” and 8% state they are “Somewhat Aware.” By contrast, of faculty who are not aware of OER initiatives at their institution, 10% state they are “Very Aware” of OER, 17% state they are “Aware,” and 13% state they are “Somewhat Aware.”

Results were compared between faculty at two- and four-year institutions to highlight discrepancies (if any) between the two.

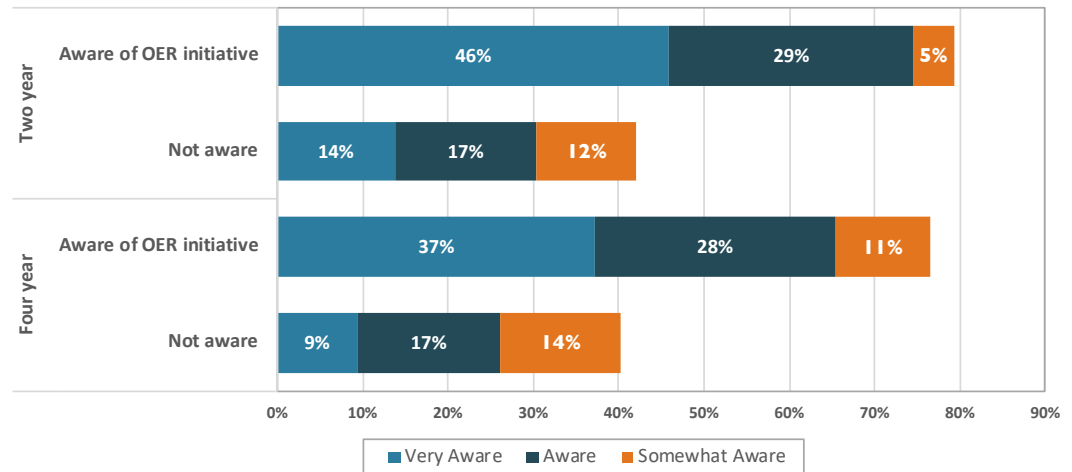
#### AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS 2018-19



Faculty at two-year institutions are much more likely to be aware of an OER initiative than those at four-year institutions. This is likely in response to the 2015 Hewlett strategy focus, efforts by the OER community and organizations, and the availability of open textbooks for the first two years of college.

While OER initiatives are rarer at four-year institutions, responses show that they are almost as effective at as those at two-year institutions.

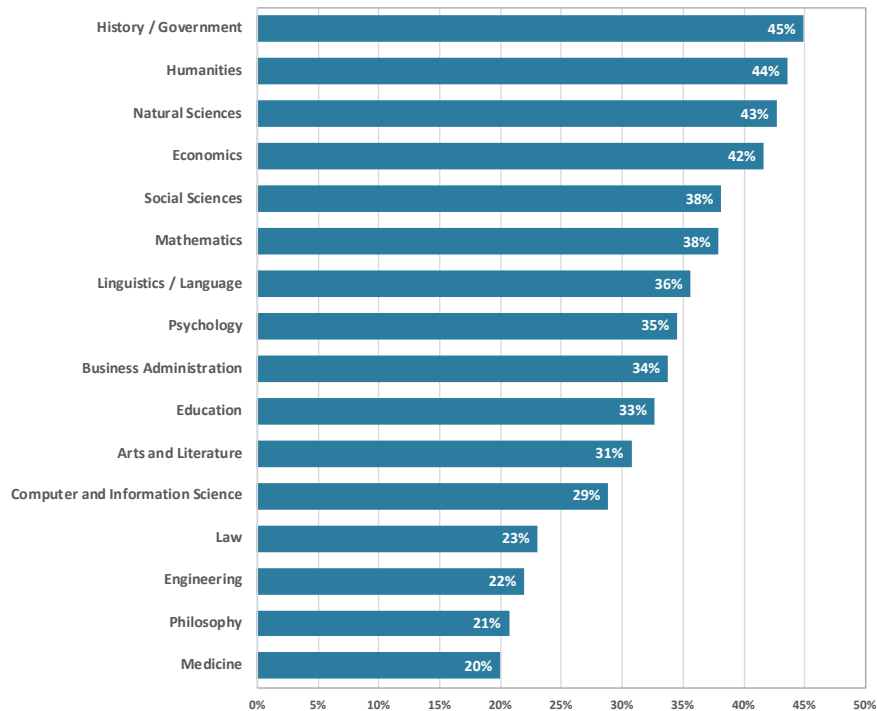
AWARENESS OF OPEN EDUCATIONAL RESOURCES AT PUBLIC INSTITUTIONS  
2018-19



Of those faculty aware of OER initiatives at their institutions, 37% of those at four-year institutions are “Very Aware” of OER, as compared to 46% at two-year institutions; 28% of faculty at four-year institutions are “Aware,” compared to 29% at two-year institutions, while 11% are "Somewhat Aware," compared to 5% at two-year institutions.

Higher awareness of OER initiatives are reported by faculty who teach introductory college courses and courses for the first two years of college. This is likely due to the concerted efforts of the OER community to focus OER funding and initiatives on producing and promoting resources for the first two years of college.

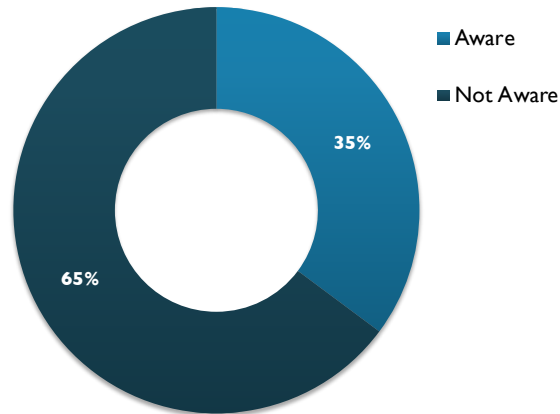
AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES BY DISCIPLINE AT PUBLIC INSTITUTIONS 2018-19



Faculty teaching upper division courses and those teaching professional (graduate-level) courses report less awareness of OER initiatives. That being said, numbers are greater in disciplines such as Computer and Information Science, which have a long history of promoting open computing worldwide. As time goes on, and the catalogue of OER textbooks and resources continues to expand into upper level and graduate courses, this phenomenon may change. It may also be possible that an increase in the number of institutions where OER publishing counted toward tenure and promotion, more faculty would be motivated to adopt, adapt, and publish more OER.

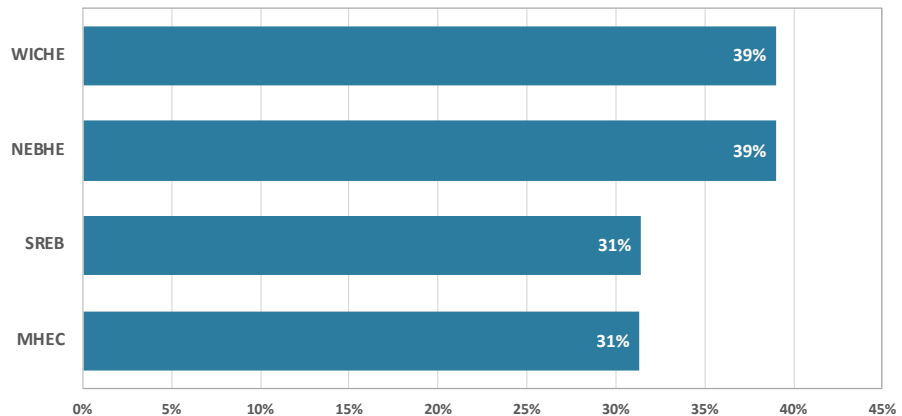
Over one-third of faculty teaching at all levels among all U.S. public higher education institutions stated that they were aware of at least one OER initiative at their institution. Future expansion of numbers of large-scale OER initiatives would target the two-thirds of all teaching faculty who are not currently aware of any such initiative.

AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS 2018-19



Responses were compared across regional State Higher Education compacts. A positive correlation between large-scale OER initiatives in the WICHE and NEBHE regions may contribute to overall awareness of OER. Member states in the WICHE and NEBHE regions have established OER efforts at the institution, system and state levels.

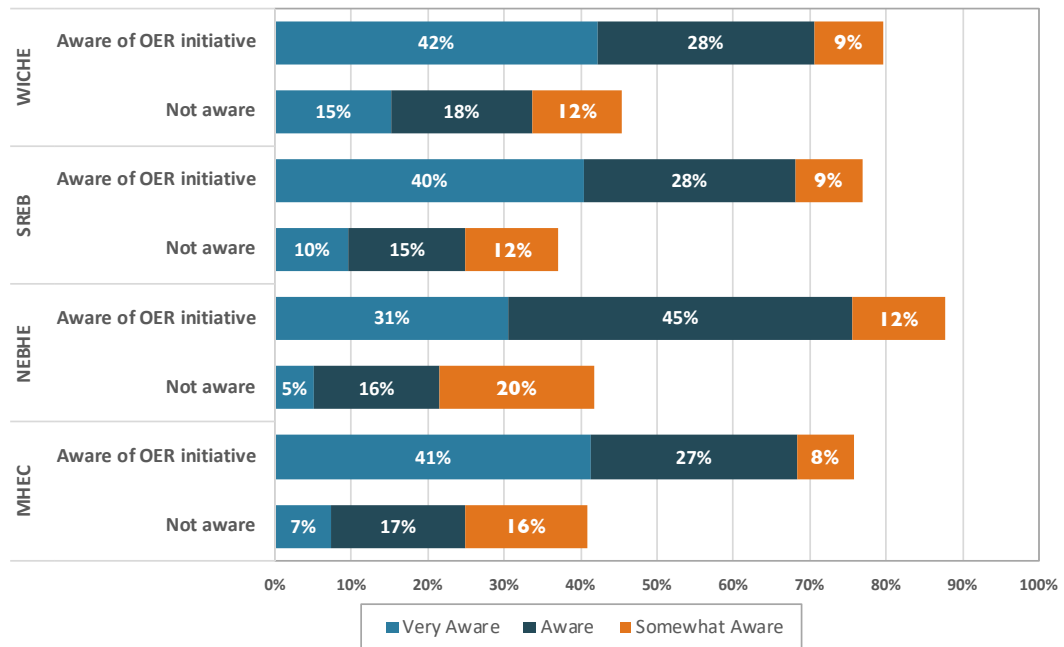
AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS BY REGIONAL COMPACT 2018-19



For example, in the WICHE region California boasts OER efforts such as MERLOT,<sup>16</sup> which began in 1997 at California State University, and CCOER,<sup>17</sup> which began in 2007 at the Foothill-De Anza College district. In 2012, California established an OER Council, thanks to two legislative bills which included funding and policy.<sup>18</sup>

State, system, and institution OER initiatives in Rhode Island, Massachusetts and Connecticut (NEBHE region) and in Florida and Georgia (SREB region) and in North Dakota and Minnesota (MHEC region) all likely contributed to faculty awareness in corresponding state compact regions. The results show a substantial increase in OER awareness across all four regions among faculty that know of an OER initiative. These results mirror the examples above, once again demonstrating an uptick in awareness in OER when OER initiatives are in place.

AWARENESS OF OPEN EDUCATIONAL RESOURCES AT PUBLIC INSTITUTIONS  
2018-19



<sup>16</sup> <https://www.merlot.org/merlot/>

<sup>17</sup> <https://www.ccoer.org/about/about-ccoer/>

<sup>18</sup> <https://www.asccc.org/content/open-educational-resources-and-california-community-colleges>



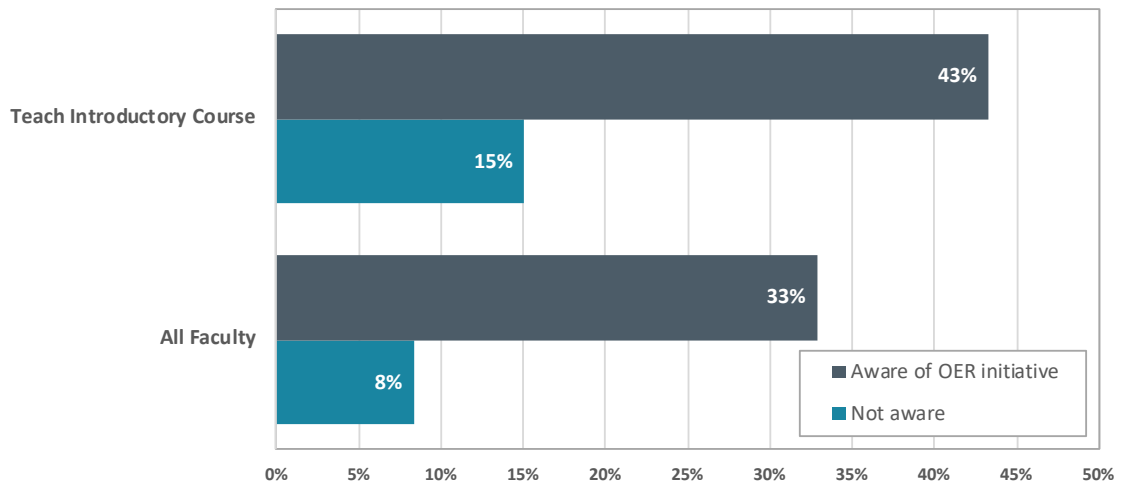
## OER Initiatives and Adoption

*There is a strong relationship for teaching faculty between those who know about an OER initiative and their adoption of OER as required course materials.*

If an OER initiative leads to increased awareness of Open Educational Resources, does this lead to greater levels of adoption? Are faculty who are aware of one or more OER initiatives adopting OER in higher numbers than those that have not heard of these efforts?

Faculty who are aware of one or more OER initiatives are much more likely to be adopters of OER. This holds true for both faculty teaching introductory-level courses and the general population of faculty. Faculty teaching introductory-level courses are almost three times as likely to adopt an OER textbook (43%, as compared to 15%) if they are aware of an OER initiative, while the ratio among all faculty is four to one (33%, compared to 8%).

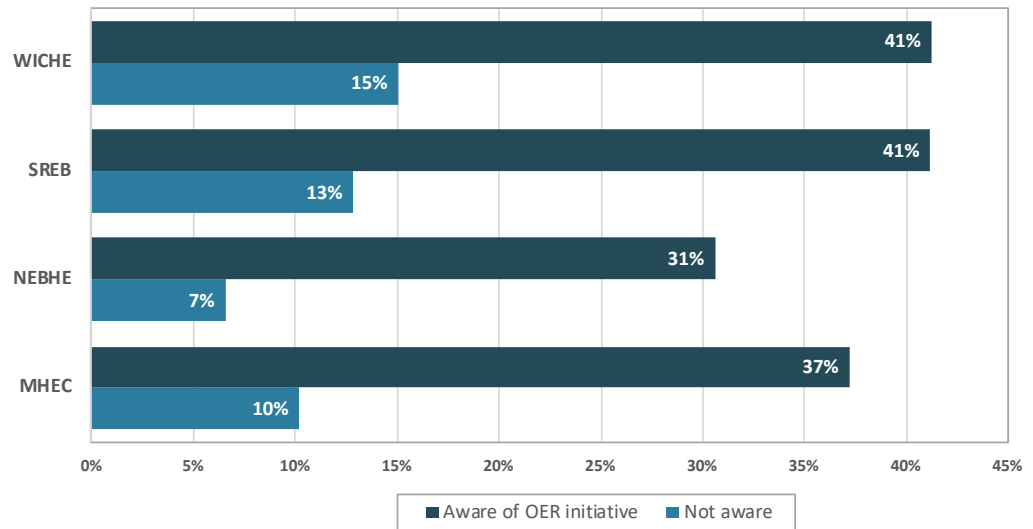
OER ADOPTION BY AWARENESS OF OER INITIATIVES 2018-19



While these results strongly suggest that OER initiatives are having a positive impact on OER adoption, there may be other factors that play a role here as well. It may be, for example, that OER initiatives are more common at institutions where faculty are more aware of the principles and potential benefits of OER, or the institutional need is greater, acting as a proxy for the institutional culture. That said, the magnitude of these results is such that it appears that institutional initiatives are having a sizeable impact, and are a critical tool that institutions can use to grow OER adoption.

These results hold true across the U.S. Across the regional compacts surveyed, higher OER adoption remains linked to OER initiatives at the institutional level. Across the WICHE, SREB, NEBHE, AND MHEC regional compacts, OER adoption remains higher when faculty report being aware of OER initiatives at their institutions. In each region, faculty are almost three times as likely to be Aware of OER initiatives as opposed to not aware — 41% “Aware” versus 15% and 13% “Not Aware” for the WICHE and SREB regions, respectively, 31% “Aware” versus 7% “Not Aware” in the NEBHE region, and 37% “Aware” versus 10% “Not Aware” in the MHEC region.

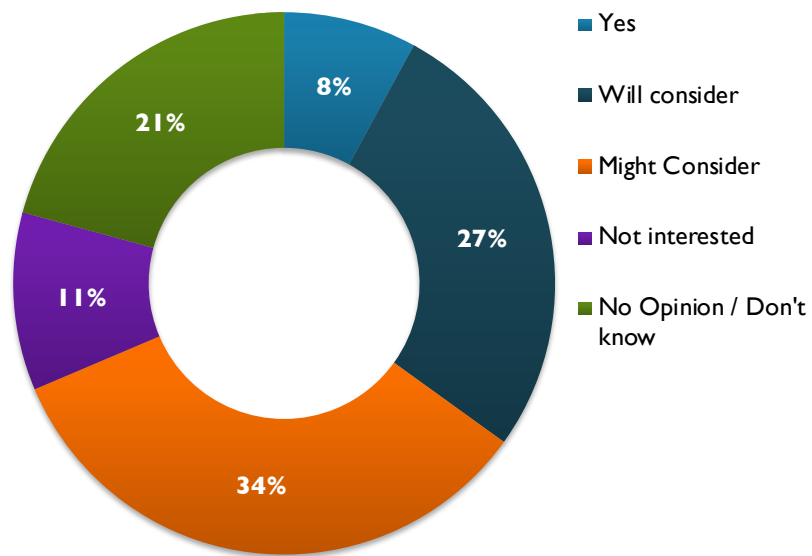
OER ADOPTION BY AWARENESS OF OER INITIATIVES 2018-19



## OER Initiatives and Future Adoption

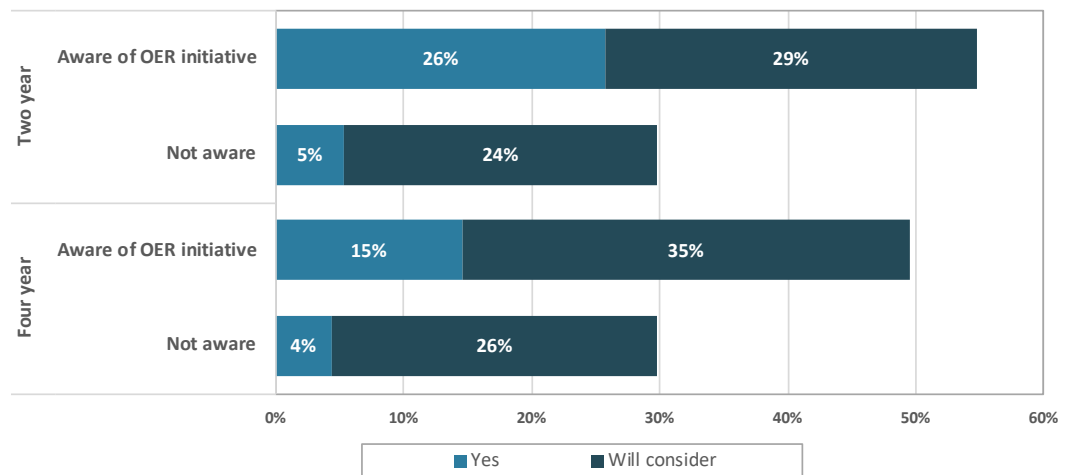
Faculty who were not using any OER materials were asked about their potential use of OER in the next three years. Overall, 8% of faculty at all public institutions report that they will be using OER within the next three years. The majority of respondents (34%) claimed that they might consider adopting OER; 27% said they would consider using OER, and 11% remain uninterested in adopting OER. A further 21% of respondents say they have no opinion, or do not know whether they will adopt OER.

USE OER IN THE NEXT THREE YEARS?



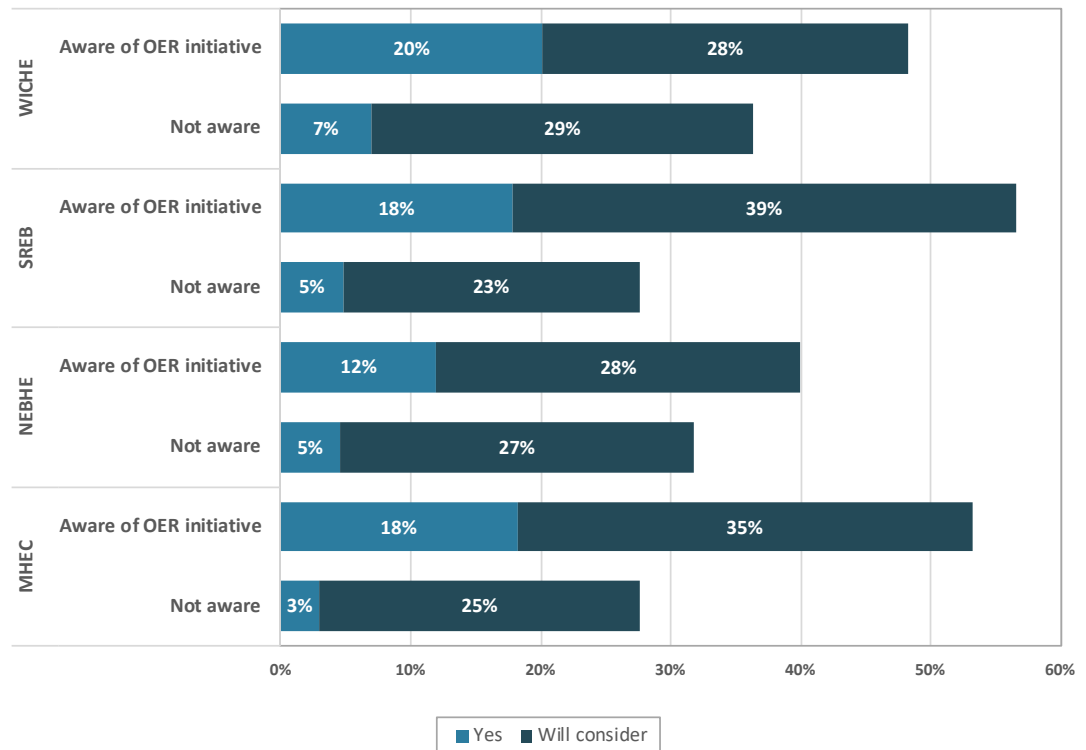
Faculty at public institutions who responded that they "will" or "will consider" using OER in the next three years were then considered by institution to gauge the effects of awareness of OER initiatives. Faculty who are aware of OER initiatives at two-year institutions are slightly more likely than those at four-year institutions to readily adopt OER in the next three years; 26% responded that they would be using OER, as opposed to 15% at four-year institutions. That said, a greater percentage of faculty at four-year institutions claimed they would consider adopting OER (35%, versus 29%). Of those faculty not aware of OER initiatives at their institution, the difference is slighter: 5% of faculty at two-year institutions will adopt OER in the next three years and 24% will consider it, as opposed to 4% pledging adoption and 26% considering adoption at four-year institutions.

USE OER IN THE NEXT THREE YEARS AT PUBLIC INSTITUTIONS 2018-19



When viewed through a regional lens, the aforementioned trend continues: faculty responses repeatedly show a greater propensity for adopting OER in the future, when they are aware of OER initiatives at their institutions. The majority of faculty have pledged to consider OER adoption — as opposed to stating the will adopt OER — whether aware or unaware of OER initiatives at their institutions. Of those unaware of OER initiatives, only a small percentage have pledged to adopt OER in the near future: 3% in the MHEC region, 5% in the NEBHE and SREB regions, and 7% in the WICHE region.

USE OER IN THE NEXT THREE YEARS AT PUBLIC INSTITUTIONS 2018-19



## Summary

High-level OER initiatives (foundations, institutions, systems, states, multi-state compact regions) influence the adoption of open educational resources. The adoption of OER is on the rise, with faculty at public institutions showing increased levels of awareness of OER year over year, for the past five years. That said, awareness of OER — what it is, and its potential benefits and drawbacks — remains a roadblock for expanded OER adoption. Substantial numbers of faculty remain either unaware or “Somewhat Aware” of OER.

When faculty are aware of OER initiatives at their institution, however, there is an increased awareness of OER, and an increased reported likelihood of consideration and of future OER adoption. This remains true across types of public institutions (whether two- or four-year), and across regional compacts. Put succinctly, when initiatives are present to introduce faculty to the tenets and merits of Open Educational Resources, faculty have demonstrated an inclination to pursue OER as an alternative to traditional commercial resources.

## Next Steps

While these results show a strong relationship between faculty awareness of OER initiatives, an increased awareness of OER and an increased reported likelihood of consideration and of future OER adoption by faculty, questions still remain:

What impact do OER initiatives ultimately have on faculty teaching practice and student learning? Will increasing numbers of faculty adopting and using OER materials change the teaching and learning in their classes, and if so, in what ways?

What is the most efficient and effective way to design, implement, and measure an OER initiative at institutions, systems, states, and multi-state compact regions? The results of this study show that awareness of an initiative is strongly related to OER awareness and adoption, but does not address what types of initiatives are most effective, and why.

What impact does philanthropic strategy have on OER initiatives, and how does strategic investment ultimately impact the likelihood of consideration and OER adoption by faculty?

How can the regional compacts support the efforts of those leading OER initiatives in institutions, systems, and in states? Regional compacts are ideally suited to coordinate and encourage such initiatives through their members. What is the best way for them to work with the institutions in their members states on such an effort?

How would a large-scale, coordinated OER Initiative at the system, state, and multi-state regional compact level (MHEC, WICHE, SREB, NEBHE) impact on faculty OER creation adoption? How would such efforts affect faculty teaching practice and student learning? What is the best approach for tracking and measuring any such impact?

Finally, what impact will COVID-19 have on the questions above? What is the most effective way to implement and sustain OER initiatives at institutions, systems, states, and multi-state compact regions in the midst of a pandemic? How will the pandemic affect faculty decisions regarding OER teaching and learning materials?

# METHODOLOGY

The data for this report comes from survey results using national samples of teaching faculty and department chairpersons. These samples are designed to be representative of the overall range of teaching faculty and department chairpersons in U.S. higher education. A multi-stage selection process was used for creating the stratified samples. The process began by obtaining data from a commercial source, Market Data Retrieval,<sup>19</sup> which has over one and a half million faculty records and claims that its records represent 93% of all teaching faculty.

A total of 4,339 faculty and 1,431 chairpersons responded to a sufficient number of questions to be included in the analysis, representing the full range of higher education institutions (two-year, four-year, all Carnegie classifications, and public, private nonprofit, and for-profit) and the complete range of faculty (full- and part-time, tenured or not, and all disciplines). More than 74% of faculty respondents report that they are full-time faculty members. Over 34% teach at least one online course, and 29% teach at least one blended course.

The specific wording of questions is critical in measuring the level of OER awareness. The wording for this report (provided below) matches that used in previous reports in this series. It was found to have the best balance in differentiating amongst different levels of awareness, while avoiding leading those with no previous knowledge of the concept.

How aware are you of Open Educational Resources (OER)? OER is defined as "teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others." Unlike traditionally copyrighted material, these resources are available for "open" use, which means users can edit, modify, customize, and share them.

- I am not aware of OER
- I have heard of OER, but don't know much about them
- I am somewhat aware of OER but I am not sure how they can be used
- I am aware of OER and some of their use cases
- I am very aware of OER and know how they can be used in the classroom

This question may still slightly overstate the level of OER awareness, so we also ask a series of additional questions. Because licensing for remixing and reuse is central to the concept of OER, a question about the respondent's awareness of different legal permissions was asked of all respondents before any questions about OER awareness itself:

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<sup>19</sup> <http://schooldata.com/wordpress/wp-content/uploads/2014/06/MDR-Education-Catalog.pdf>



How aware are you of each of the following licensing mechanisms?

	Unaware	Somewhat Aware	Aware	Very Aware
Public Domain				
Copyright				
Creative Commons				

By combining the responses from the OER awareness question with those of the licensing questions, a combined index of awareness is constructed. An identical process was used in previous reports in this series, to permit year-over-year comparisons and trend analysis.

# APPENDIX

This appendix provides the full data used to construct all the charts included in the body of the report.

## National OER Awareness

### AWARENESS OF OPEN EDUCATIONAL RESOURCES AND CREATIVE COMMONS: 2018-19

Very Aware	Aware	Somewhat Aware	Not Aware
13.5%	17.2%	12.9%	56.4%

### AWARENESS OF OPEN EDUCATIONAL RESOURCES AND CREATIVE COMMONS : 2014-15 TO 2018-19

	Very Aware	Aware	Somewhat Aware	Not Aware
2014-15	4.6%	11.9%	9.9%	73.6%
2015-16	5.9%	16.0%	11.9%	66.3%
2016-17	8.4%	16.6%	12.1%	62.9%
2017-18	11.9%	15.7%	11.3%	61.1%
2018-19	13.5%	17.2%	12.9%	56.4%

## National OER Use

### USED OPEN EDUCATIONAL RESOURCES IN ANY COURSE 2017-18

	All Faculty	Teach Introductory Courses
Required Course Material	14.0%	25.7%
Supplemental Course Material	22.7%	26.4%

### USED OPEN EDUCATIONAL RESOURCES IN ANY COURSE AS REQUIRED MATERIAL: 2015-16 TO 2017-18

	All Faculty	Teach Introductory Courses
2015-16	4.8%	7.6%
2016-17	6.5%	14.8%
2017-18	12.8%	21.9%
2018-19	14.0%	25.7%



## OER Initiatives and Awareness

### AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS 2018-19

	Teach Introductory Course	All Faculty
Department-level initiative	8%	3%
System-wide initiative	14%	8%
Institution-level initiative	27%	19%

### AWARENESS OF OPEN EDUCATIONAL RESOURCES AT PUBLIC INSTITUTIONS 2018-19

	Not aware	Aware of OER initiative
Very Aware	10%	41%
Aware	17%	28%
Somewhat Aware	13%	8%

### AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS 2018-19

Four-year	29%
Two-year	49%

### AWARENESS OF OPEN EDUCATIONAL RESOURCES AT PUBLIC INSTITUTIONS 2018-19

		Very Aware	Aware	Somewhat Aware
Four-year	Not aware	9%	17%	14%
	Aware of OER initiative	37%	28%	11%
Two-year	Not aware	14%	17%	12%
	Aware of OER initiative	46%	29%	5%

### AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES BY DISCIPLINE AT PUBLIC INSTITUTIONS 2018-19

Medicine	20%
Philosophy	21%
Engineering	22%
Law	23%
Computer and Information Science	29%
Arts and Literature	31%
Education	33%
Business Administration	34%
Psychology	35%
Linguistics / Language	36%
Mathematics	38%
Social Sciences	38%
Economics	42%
Natural Sciences	43%
Humanities	44%
History / Government	45%

### AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS 2018-19

	<b>Aware</b>	<b>Not Aware</b>
Awareness of Open Educational Resources	35%	65%

### AWARENESS OF OPEN EDUCATIONAL RESOURCE INITIATIVES AT PUBLIC INSTITUTIONS BY REGIONAL COMPACT 2018-19

MHEC	31%
SREB	31%
NEBHE	39%
WICHE	39%

### AWARENESS OF OPEN EDUCATIONAL RESOURCES AT PUBLIC INSTITUTIONS 2018-19

		<b>Very Aware</b>	<b>Aware</b>	<b>Somewhat Aware</b>
MHEC	Not aware	7%	17%	16%
	Aware of OER initiative	41%	27%	8%
NEBHE	Not aware	5%	16%	20%
	Aware of OER initiative	31%	45%	12%
SREB	Not aware	10%	15%	12%
	Aware of OER initiative	40%	28%	9%
WICHE	Not aware	15%	18%	12%
	Aware of OER initiative	42%	28%	9%

## OER Initiatives and Adoption

### OER ADOPTION BY AWARENESS OF OER INITIATIVES 2018-19

	All Faculty	Teach Introductory Course
Not aware	8.3%	15.2%
Aware of OER initiative	32.9%	43.3%

### OER ADOPTION BY AWARENESS OF OER INITIATIVES 2018-19

	Not aware	Aware of OER initiative
MHEC	10.2%	37.2%
NEBHE	6.6%	30.6%
SREB	12.9%	41.2%
WICHE	15.1%	41.3%

## OER Initiatives and Future Adoption

### USE OER IN THE NEXT THREE YEARS?

Yes	8.0%
Will consider	27.0%
Might Consider	33.7%
Not interested	10.6%
No Opinion / Don't know	20.8%

### USE OER IN THE NEXT THREE YEARS AT PUBLIC INSTITUTIONS 2018-19

		Yes	Will consider
Four-year	Not aware	4%	26%
	Aware of OER initiative	15%	35%
Two-year	Not aware	5%	24%
	Aware of OER initiative	26%	29%

### USE OER IN THE NEXT THREE YEARS AT PUBLIC INSTITUTIONS 2018-19

		Yes	Will consider
MHEC	Not aware	2.9%	24.8%
	Aware of OER initiative	18.2%	35.1%
NEBHE	Not aware	4.5%	27.3%
	Aware of OER initiative	12.0%	28.0%
SREB	Not aware	4.8%	22.8%
	Aware of OER initiative	17.8%	38.8%
WICHE	Not aware	7.0%	29.4%
	Aware of OER initiative	20.2%	28.1%

# OPEN

High-level OER initiatives (institutions, systems, states, multi-state compact regions) influence the adoption of open educational resources. The adoption of OER is on the rise, with faculty at public institutions showing increased levels of awareness of OER year over year, for the past five years. That said, awareness of OER — what it is, and its potential benefits and drawbacks — remains a roadblock for expanded OER adoption. Substantial numbers of faculty remain either unaware or “Somewhat Aware” of OER.

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Bay View Analytics



The Impact of OER Initiatives on Faculty Selection of Classroom Materials is licensed under a Creative Commons Attribution 4.0 International License. Report available at: <http://www.onlinelearningsurvey.com/oer.html>.

