

Opening the Curriculum:

Open Educational Resources in U.S. Higher Education, 2014

I. Elaine Allen and Jeff Seaman



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Report available at: <http://www.onlinelearningsurvey.com/oer.html>.

ACKNOWLEDGMENTS

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Pearson provided resources that allowed the construction of an expansive, nationally representative faculty sample, as well as support for the overall production and distribution of this report. They also provided the ebook conversions and the design and production of an infographic to accompany the report.

Finally, the report presents results derived from a national-representative sample of higher education teaching faculty. We want to thank the thousands of faculty members who took the time to provide us with their detailed and thoughtful responses. We understand that you are very busy people, and appreciate your effort very much. This report would not be possible without you, and we hope that you find it useful.



Co-Directors
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EXECUTIVE SUMMARY

Awareness and adoption of open educational resources (OER) has yet to enter the mainstream of higher education. Most faculty remain unaware of OER, and OER is not a driving force for faculty decisions about which educational materials to adopt. The picture does include some promising signals, as results show that faculty find the concept attractive: those who are aware of OER rate it roughly on par with traditional resources, and those who have not yet used it are very willing to give it a try.

Key findings:

Faculty are not very aware of open educational resources. Depending on the strictness of the awareness measure, between two-thirds and three-quarters of all faculty classify themselves as unaware on OER.

Faculty appreciate the concepts of OER. Unlike most technological inroads in teaching, OER does not suffer from any strong objections or entrenched opposition groups. When presented with the concept of OER, most faculty say that they are willing to give it a try.

Awareness of OER is not a requirement for adoption of OER. More faculty are using OER than report that they were aware of the term OER. Resource adoption decisions are driven by a wide variety of factors, with the efficacy of the material being cited most often. These decisions are often made without any awareness of the specific licensing of the material, or its OER status.

Faculty judge the quality of OER to be roughly equivalent to that of traditional educational resources. Most faculty report that they are not sufficiently aware of OER to judge its quality. Among those who do offer an opinion, three-quarters rank OER as the same as or better than traditional resources.

The most significant barrier to wider adoption of OER remains a faculty perception of the time and effort required to find and evaluate it. The top three cited barriers among faculty members for OER adoption all concern the discovery and evaluation of OER materials. Results show that 38% of faculty rate the ease of finding OER as “difficult” or “very difficult.” While a concern for OER advocates, traditional resources do not fare much better, with 27.2% of faculty rating finding these as “difficult” or “very difficult.”

Faculty are the key decision makers for OER adoption. It is hardly surprising that those delivering education play a critical role in deciding what educational resources go into that delivery. Previous results among chief academic officers noted that faculty are almost always involved in an adoption decision and — except for rare instances — have the primary role. Faculty in the current survey echo this view. The only exceptions are in a minority of two-year and for-profit institutions, where the administration takes the lead.

OPEN EDUCATIONAL RESOURCES

The Hewlett Foundation defines open educational resources (OER) 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. 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”¹

Formal initiatives in OER can be traced to the late 20th Century through developments in distance (and now online) learning. The term “open educational resources” was first adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries.²

PREVIOUS STUDIES

This report builds on several previous Babson Survey Research Group efforts exploring the role of OER in higher education. These efforts began in 2009 with the inclusion of questions about the knowledge, use and opinion of OER among academic leaders. These questions were continued for 2010 and 2011, and grew to seek the opinions of faculty in higher education and academic technology administrators, in addition to academic leaders³. Finally, a survey of faculty on their use of social media also asked for faculty their opinions on OER⁴. Highlights from these reports include⁵:

- Most academic leaders were at least somewhat aware of open educational resources (OER) and slightly over half listed themselves as “Aware” or “Very aware.”
- Only one-half of all chief academic officers reported that any of the courses at their institution currently used OER materials.
- In 2011, most surveyed academic leaders reported that open educational resources would have value for their campus; 57% agreed that they have value and less than 5% disagreed.
- Nearly two-thirds of all chief academic officers agreed that open educational resources have the potential to reduce costs for their institution.
- There was wide agreement among academic leaders that open educational resources will save time in the development of new courses.

¹ <http://www.hewlett.org/programs/education-program/open-educational-resources>.

² Johnstone, Sally M. (2005). "Open Educational Resources Serve the World". *Educause Quarterly* 28 (3). Retrieved 2012-8-13.

² Johnstone, Sally M. (2005). "Open Educational Resources Serve the World". *Educause Quarterly* 28 (3). Retrieved 2012-8-13.

³ Allen, I Elaine, Jeff Seaman, with Doug Lederman, Scott Jaschik, *Digital Faculty: Professor, Teaching and Technology*, 2012, Babson Survey Research Group.

⁴ Moran, Mike, Jeff Seaman, Hester Tinti-Kane, *Blogs, Wikis, Podcasts and Facebook: How Today's Higher Education Faculty Use Social Media*, Pearson Learning Solutions and Babson Survey Research Group.

⁵ All reports are available at <http://www.quahogresearch.com>

- More than a majority of chief academic officers reported that individual faculty developing courses, faculty committees, programs or divisions, and the administration all have a role in a decision to adopt open educational resources.
- Only two groups — individual faculty members and the administration — were seen as having the primary in the decision to adopt open educational resources.
- Over one-half of academic leaders agreed or strongly agreed that open educational resources would be more useful if there was a single clearinghouse.
- Among faculty, cost (88% reporting as important or very important) and ease of use (86%) were most important for selecting online resources.
- Faculty consistently listed the time and effort to find and evaluate open educational resources as the most important barriers to adoption.
- Older faculty had a greater level of concern with all potential barriers to open educational resource adoption than did younger faculty.
- Female faculty members reported higher levels of concern for all potential open educational resource adoption barriers examined.

The current research is designed to do two things: determine if the previous results observed among higher education teaching faculty have changed over time, and explore the factors driving these trends in more depth.

STUDY RESULTS:

Who Are the OER Gatekeepers?

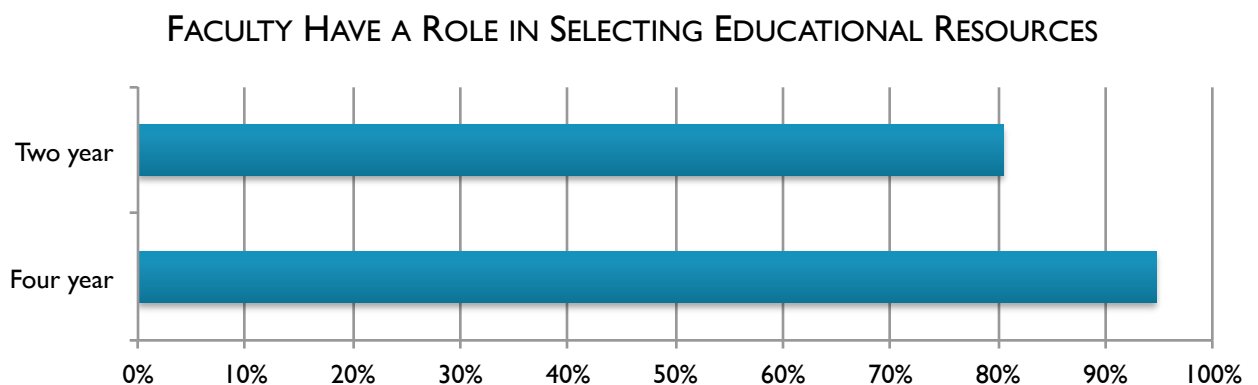
“Though my curriculum is chosen by someone else, I use many, many open resources when teaching and only rely on textbooks to the extent that students will learn from them.” (Part-time Humanities Faculty)

“There is a strangely idiosyncratic culture around course resources that is perhaps the consequence of academic freedom traditions in the US. There is little centralized sharing of best practices, although social media has changed this somewhat – I have witnessed substantial Facebook threads on textbook selection and approaches to teaching specific topic – and resource awareness and selection should be part of teacher training, which graduate students at research I institutions do not receive.” (Full-time Humanities Faculty)

A critical factor examined in our previous studies was the nature of the decision-making process for the potential adoption of OER. As might be expected from institutions that often strive for consensus in decision-making, the number of different players involved in a decision is rather large. Chief academic officers reported that individual faculty developing courses, faculty committees, programs or divisions, instructional design groups, and the administration all had a role in the decision-making.

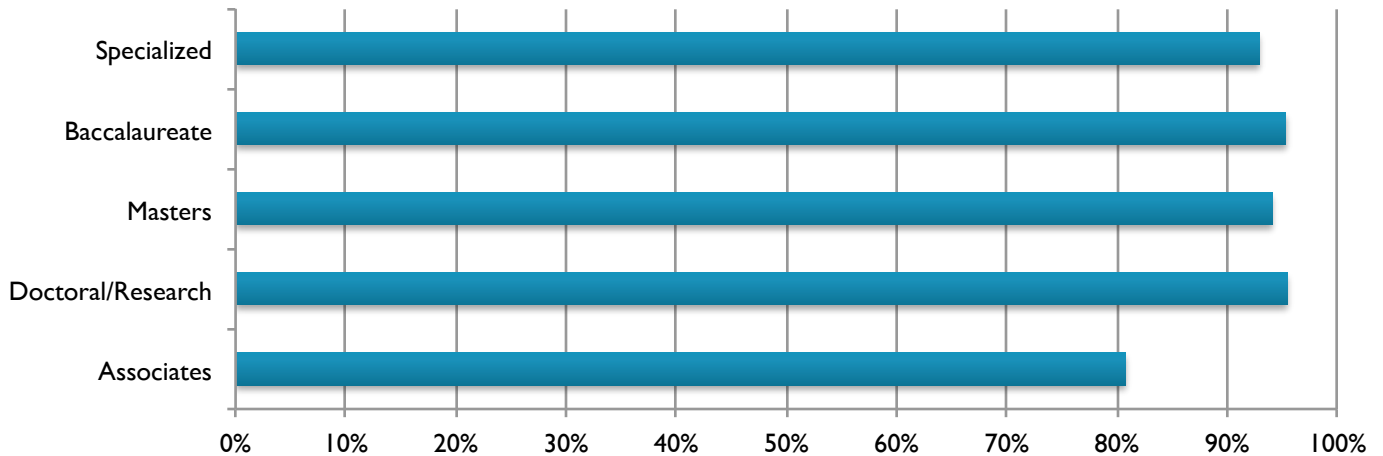
While many different groups were involved in the decision-making process, previous respondents reported that they served in an advisory capacity, with the final decisions being made by a much smaller group. When academic leaders were asked which groups on their campus had the primary role in a decision to adopt open educational resources, only two groups — individual faculty members and the administration — had a significant role. One objective for the current study was to ascertain if faculty had the same view of the decision-making process as did the academic leaders previously surveyed.

The current results show that faculty do agree with the view of the chief academic officers, responding overwhelmingly (91.8%) that they see themselves as the decision-makers for the use of OER in their courses. However, this high percentage decreases for 2-year institutions (Associates) with only 80.5% stating that they are the decision-makers for their courses. This pattern matches results from the academic leaders.



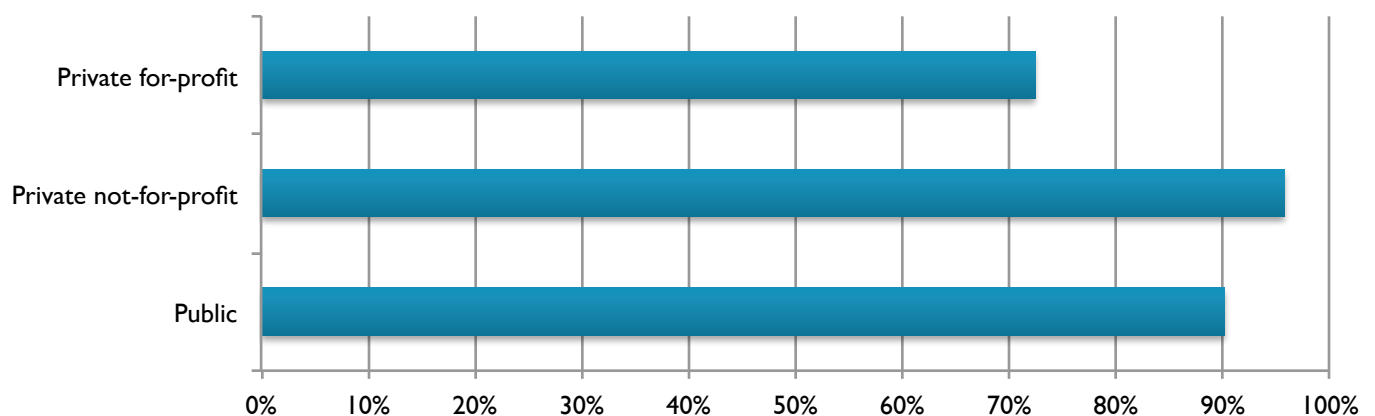
The reduced importance of direct faculty decision-making at two-year institutions is also apparent when the pattern is observed by Carnegie Classification of a faculty's institutional affiliation. With this single exception however, all other types of institutions share a very similar pattern: over 90% of the faculty report that they have a role in making a decision to adopt OER or not.

FACULTY HAVE A ROLE IN SELECTING EDUCATIONAL RESOURCES



It is interesting that the control of the institution (Private for-profit, Private not-for-profit, or Public) does make a difference in the decision to use OER, with the proportion of for-profit institutions reporting a faculty decision role being far lower than the other two types (72.5% vs. 95.8% and 90.1%, respectively). This also agrees with the results reported by the chief academic officers in the previous surveys. Along with the results noted above for two-year institutions, private for-profit institutions are the only other group to have significant administrative input into the decision.

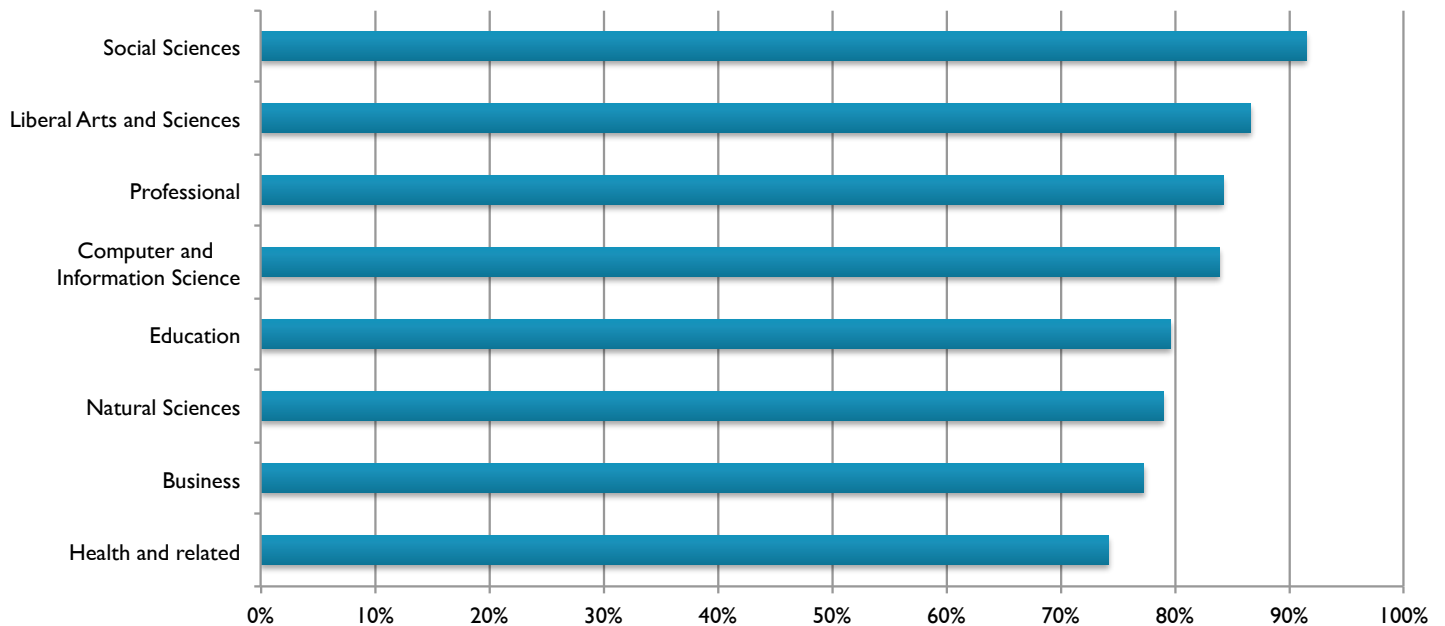
FACULTY HAVE A ROLE IN SELECTING EDUCATIONAL RESOURCES



Faculty members across all disciplines have the primary role in selecting educational resources, but the role in some disciplines is greater than others.

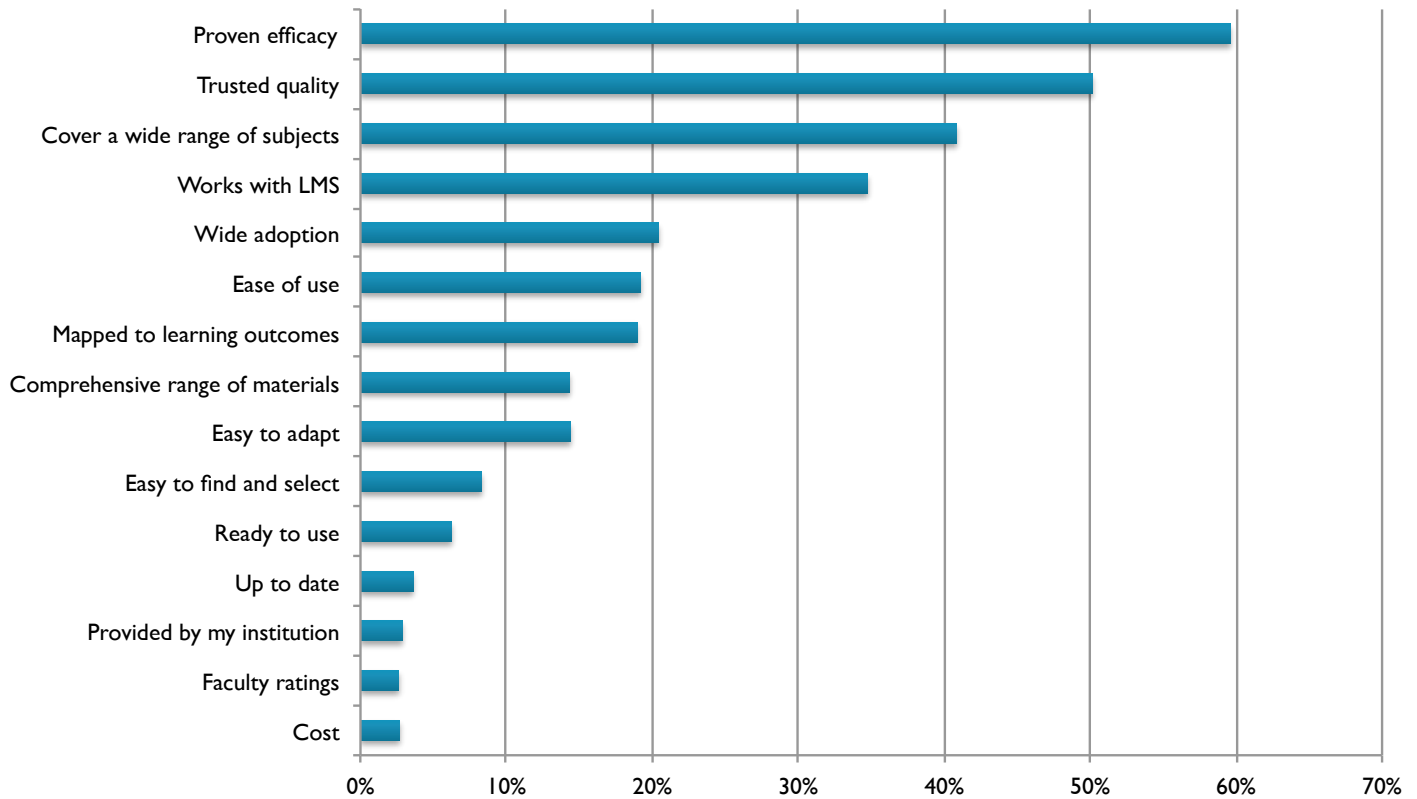
One explanation for the differing levels of faculty control by discipline is the amount of standardization across courses. Large introductory courses, for example, are often planned by a faculty committee, as many faculty are charged with delivering the same content. Likewise, courses that are required to meet specific credentialing or licensing requirements will exhibit have far more similarity and central control than advanced courses created and delivered by an individual faculty member.

FACULTY MEMBER HAS PRIMARY ROLE IN SELECTING EDUCATIONAL RESOURCES



Only a small number of criteria for choosing educational resources are consistently cited by faculty, with proven efficacy (59.6%) and trusted quality (50.1%) as most important and cost (2.7%), faculty ratings (2.6%), and provided by my institution (2.9%) as least important.

MOST IMPORTANT CRITERIA FOR SELECTING TEACHING RESOURCES



Measuring Awareness

A critical issue in measuring the level of OER awareness is exactly how the question is worded. As the previous studies demonstrated, many academics have only a vague understanding of the details of what constitutes open educational resources. Others will confuse “open” with “free” and assume all free resources are OER. Still others will confuse “open resources” with “open source” and assume OER refers only to open source software. Because of these differing levels of understanding, the phrasing of the awareness question needs to be specific. The question should outline enough of the dimensions of OER to avoid the confusion, without being so detailed that the question itself educates the respondent sufficiently enough that they can claim to be “aware.”

The importance of question wording was very apparent for the study of OER awareness among academic leaders. In 2011 nearly all of these leaders reported that they were at least somewhat aware of open educational resources (OER) and over one-half listed themselves as “Aware” or “Very aware.” However, in examining open-ended responses it was clear that there was wide variability in what respondents considered to be open educational resources. Some claiming awareness provided descriptions focusing on content, others focused on software and services (e.g. Moodle). Still others equated “open” with “free” and grouped all free resources as OER or equated open-source computer code with OER. One concept was rarely mentioned at all: licensing terms such as creative commons that permit free use or re-purposing by others.

The conclusion from these results was that while most academic leaders were somewhat aware of OER, the level of understanding of the details was seriously lacking. In addition, it appeared that many claiming to be “aware” were confusing OER with other concepts.

To address the misunderstanding evident in the previous work, multiple question wordings were tested. A question with broad definitions but no examples was more precise than a question just using the term “open educational resources.” Adding a series of detailed examples of OER was far more precise, but proved too leading for the respondents, and artificially boosted the proportion that could legitimately claim to be “aware.” Several versions were tested with different degrees of explanations and examples, but no single wording was ideal: all had their own issues. The version selected (reproduced below) was found to have the best balance in differentiating among the 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

Based on preliminary testing, the results from this question may still tend to overstate the level of OER awareness, but this was considered a better option than leading the respondent. By using a series of additional questions, the results from this question can be adjusted to remove those who might have thought that they were aware of OER, but when probed did not have knowledge of all of the aspects that make up the concept. The first of the additional questions was an open-ended query to determine what specific examples respondents considered as examples of OER:

Please provide some examples of Open Educational Resources that you are aware of.

Respondents were also presented with a series of attributes that they may or may not associate with open educational resources:

If you were to describe the concept of open resources for education to a colleague, which of the following would you include in your description?

	Not Included	May or May Not Include	Would Include
Is available for free			
Has the ability to remix and repurpose			
Is provided with a Creative Commons license			
Is easy to modify			
Is easy to combine with other course materials			
Is of high quality			
Is more up to date than textbooks			

Because licensing for remixing and reuse is central to the concept of OER, a question about the respondent's awareness of different licensing concepts was asked of all respondents *before* any questions about OER awareness itself:

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

	Unaware	Somewhat Aware	Aware	Very Aware
Public Domain				
Copyright				
Creative Commons				

The full suite of these questions provides a richer understanding of the level of awareness than possible with any single question.

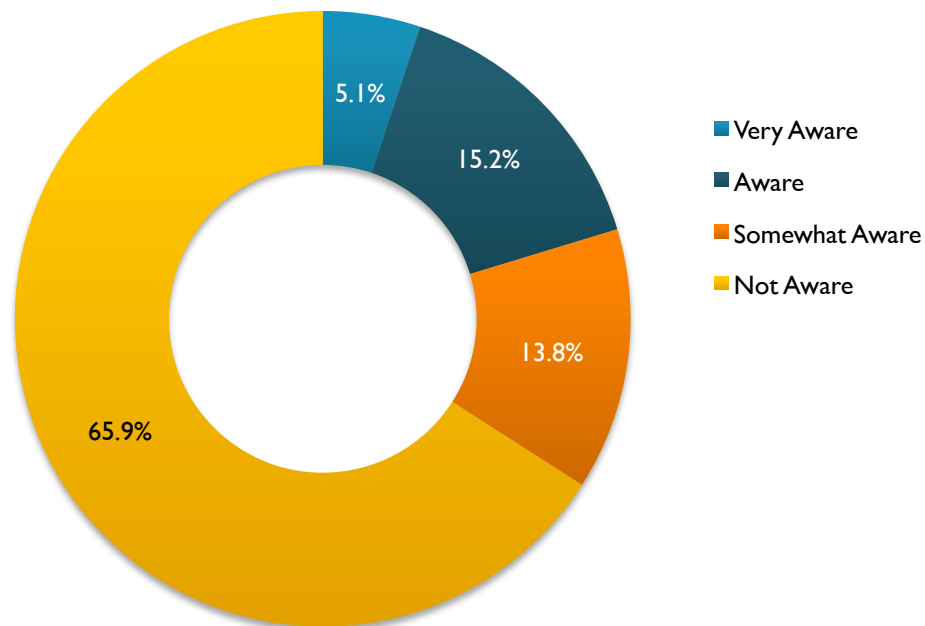
Awareness of Open Educational Resources

“I am not at all familiar with Open Educational Resources and have not used them, but I am generally quite interested, as I feel quite strongly about open access to all of my scholarly work.” (Full-time Business Administration Faculty)

“I know very little about OER and don't recall it ever coming up in detail at any of our meetings.” (Part-time Other Faculty)

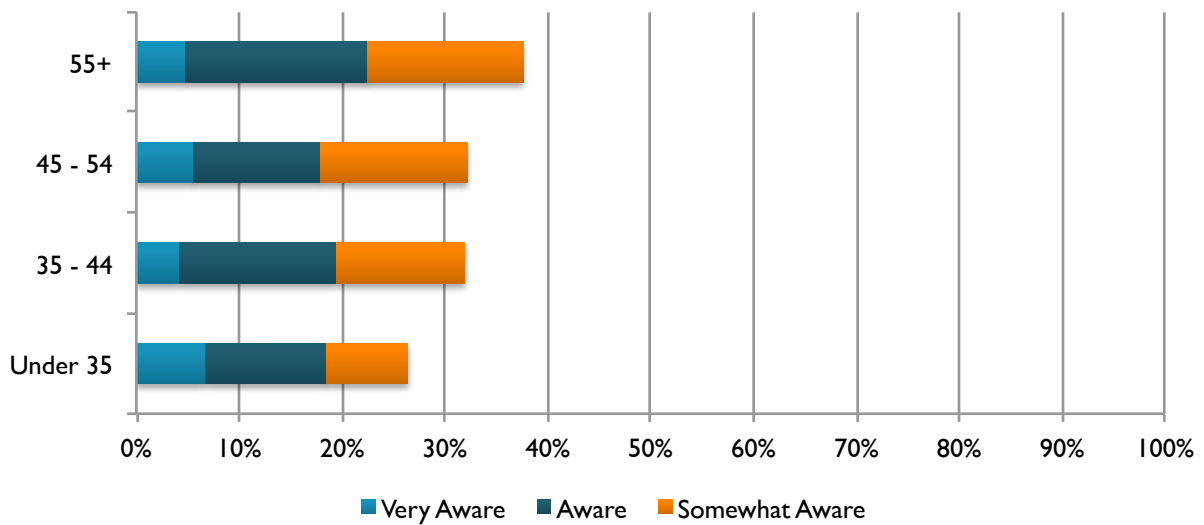
When faculty members were asked to self-report their level of awareness of open educational resources, a bit more than one-third claimed to have some level of awareness. Just over 5% reported that they were very aware (“I am very aware of OER and know how they can be used in the classroom”) with around three times that many (15%) saying that they were aware (“I am aware of OER and some of their use cases”). An additional 13% of faculty reported that they were only somewhat aware (“I am somewhat aware of OER but I am not sure how they can be used”). This left nearly two-thirds of faculty reporting that they were generally unaware of OER (“I am not aware of OER” or “I have heard of OER, but don't know much about them”).

AWARENESS OF OPEN EDUCATIONAL RESOURCES



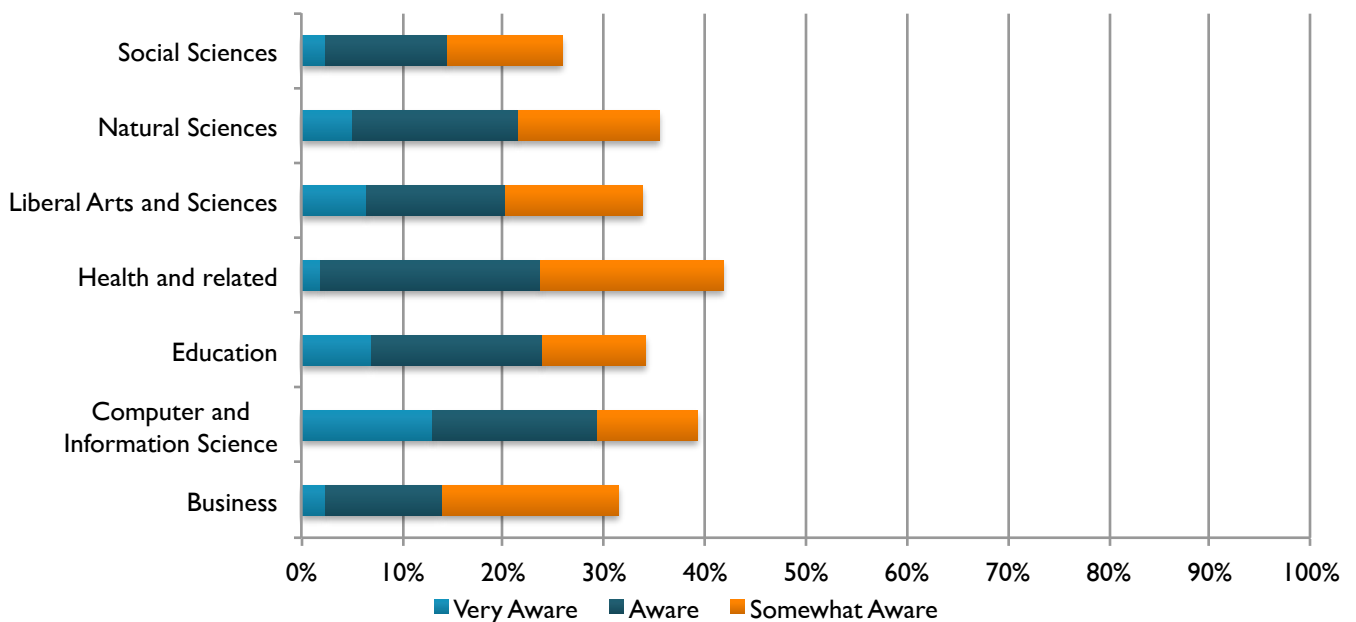
It has been hypothesized that it is the youngest faculty that are the most digitally aware, and have had the most exposure to and comfort in work with digital resources. Older faculty are sometimes assumed to be less willing to adopt the newest technology or digital resources. However, when the level of OER awareness is examined by age group, it is the oldest faculty (aged 55+) that have the greatest degree of awareness, while the youngest age group (under 35) trail behind. The youngest faculty do show the greatest proportion claiming to be “very aware” (6.7%), but have lower proportions reporting that they are “aware” or “somewhat aware.”

AWARENESS OF OPEN EDUCATIONAL RESOURCES

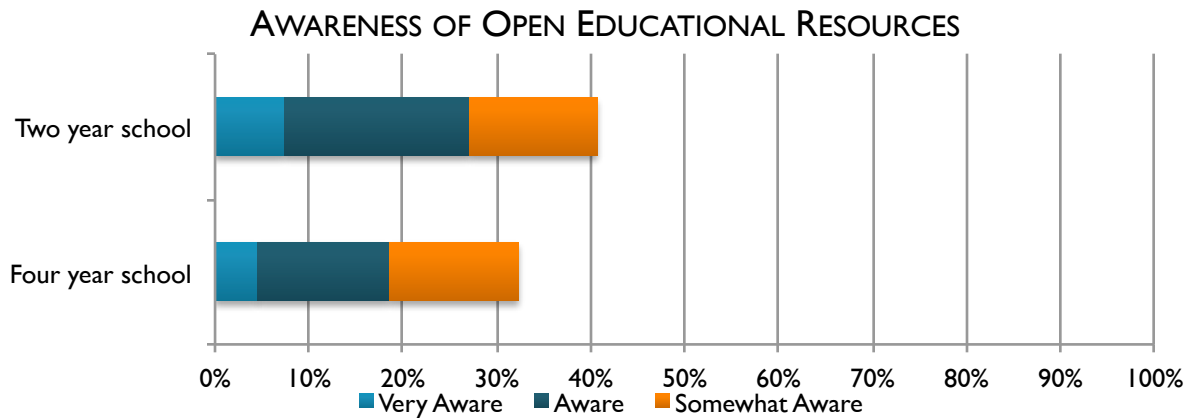


There are substantial differences in the level of OER awareness by discipline, both in the pattern of these claiming to be “very aware” and the pattern of those reporting any level of awareness. Faculty in Information Science had the second highest level of faculty reporting some level of awareness (39.2%) and the highest proportion saying that they were “very aware” of OER (13%). The pattern is very different among faculty in the Health and other related fields: they reported the highest proportion of faculty with some level of awareness of OER, but the lowest percent saying that they were “very aware” (1.9%). Faculty in Social Sciences reported the overall lowest levels of awareness, followed by Business faculty.

AWARENESS OF OPEN EDUCATIONAL RESOURCES



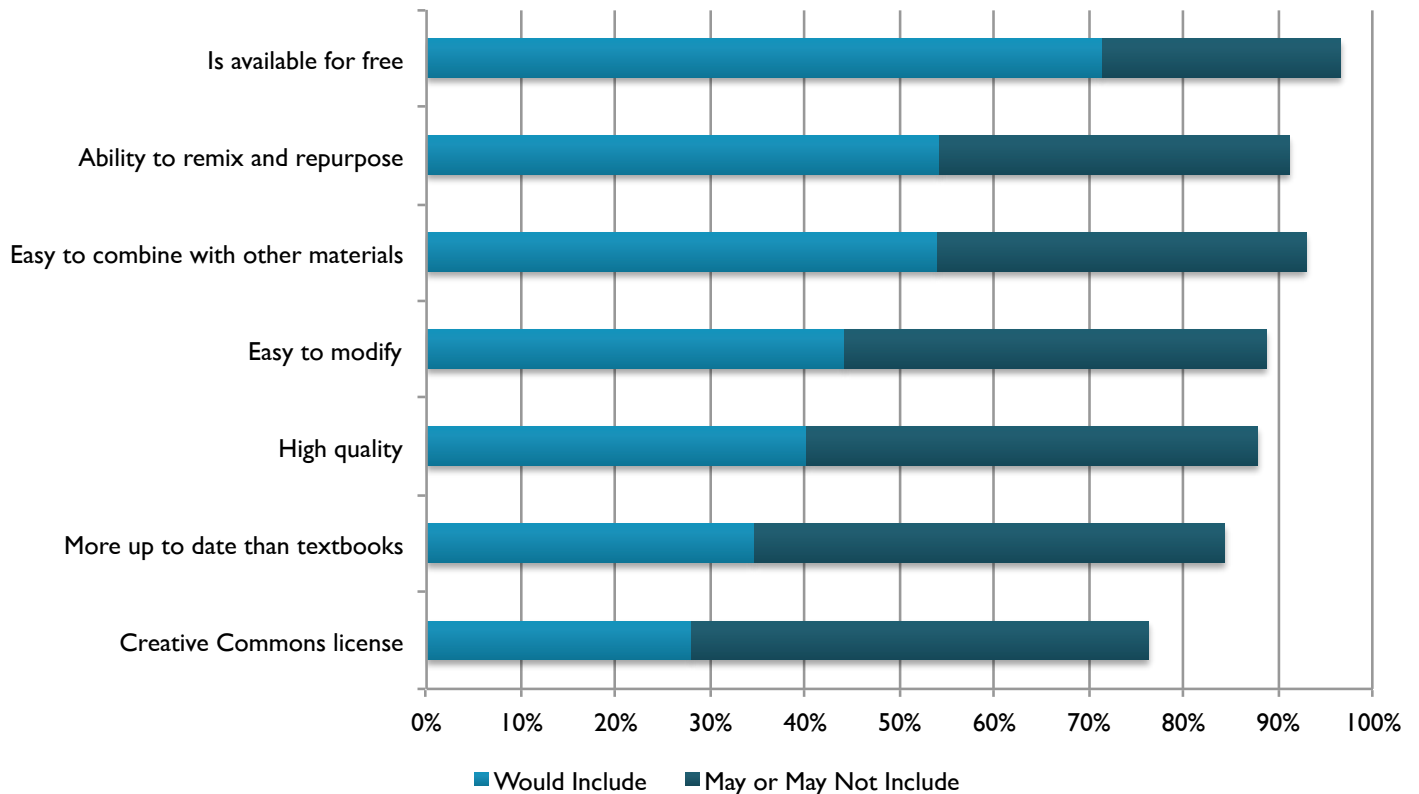
Faculty at two-year institutions report consistently higher level of awareness of OER than faculty at four-year institutions. Faculty at two-year institutions claim higher levels of being “very aware” (7.4% versus 4.5%) as well as having a greater fraction saying that they had any level of awareness (40.7% versus 32.3%). Faculty at two-year institutions, in general, seem to see greater potential for OER in their courses than do faculty at four-year institutions.



All faculty were probed to see what characteristics they considered to be part of OER by answering the question “If you were to describe the concept of open resources for education to a colleague, which of the following would you include in your description?”

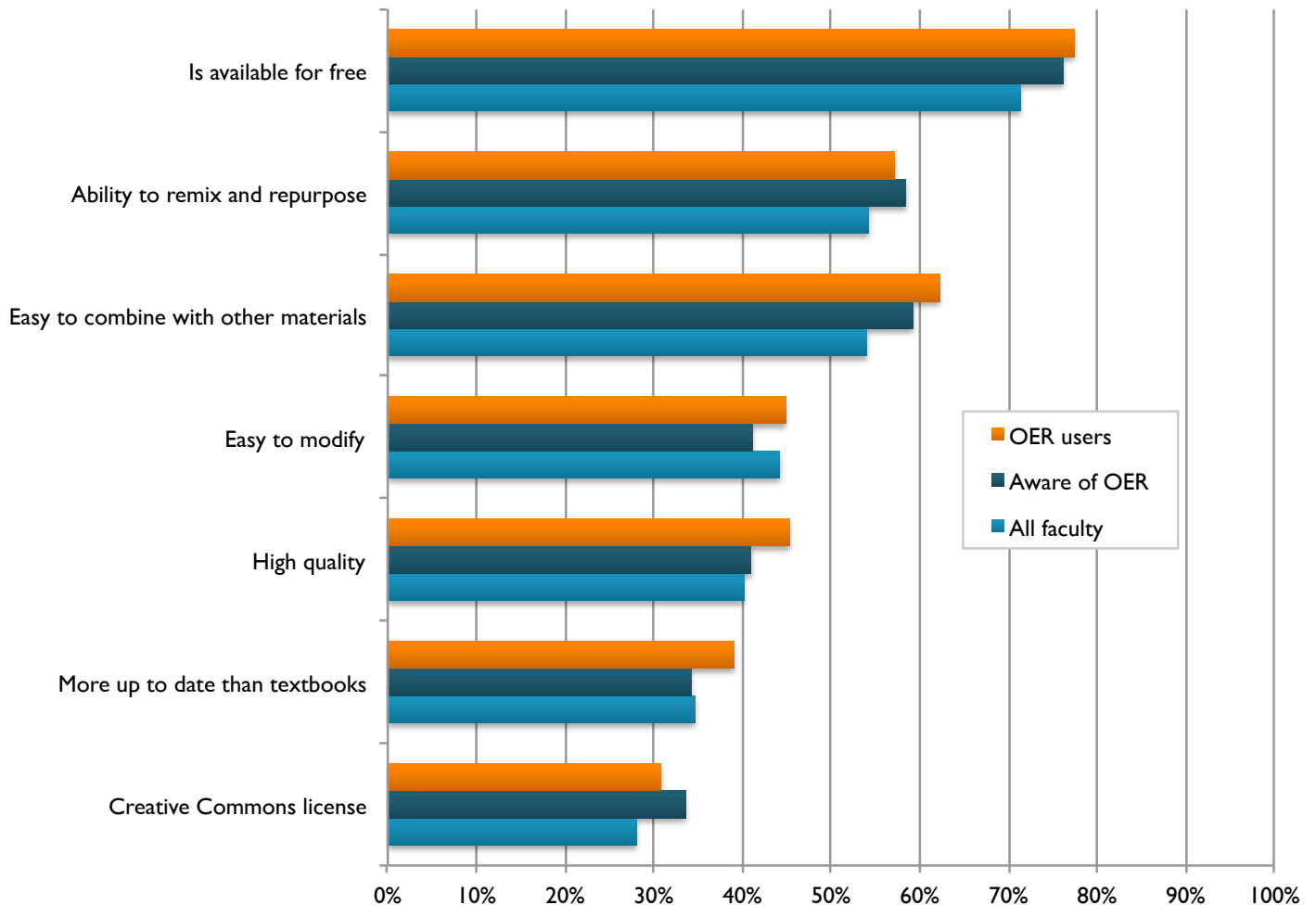
The most common response was that OER was free, which was selected by over 70% of the respondents. The ability for OER to be remixed and repurposed and that it could be easily combined with other course materials was the next most common response with 54% saying they would include this characteristic in a description of OER for a colleague. Other characteristics were selected by less than one-half of the respondents, with Creative Commons licensing being the least common attribute to be selected (28%).

FACULTY DESCRIPTION OF OPEN EDUCATIONAL RESOURCES



Comparing the pattern of responses among all faculty to those who reported that they used OER and to those who said that they were aware of OER shows that all three groups have very similar views of what constitutes open educational resources. Those who use OER or are aware of OER are slightly more likely to include most of the characteristics in their description, but the differences are minor.

FACULTY DESCRIPTION OF OPEN EDUCATIONAL RESOURCES

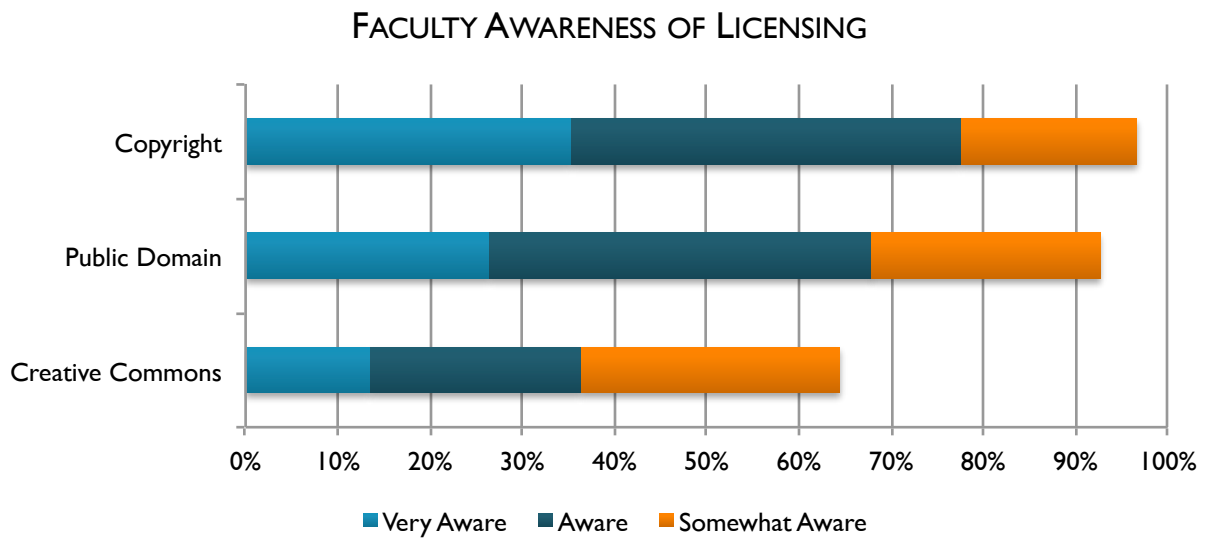


Awareness of Licensing of Open Educational Resources

“I must admit that I do not pay much attention to the origins of material. My focus is upon content, accuracy, and usability.” (Full-time Mathematics Faculty)

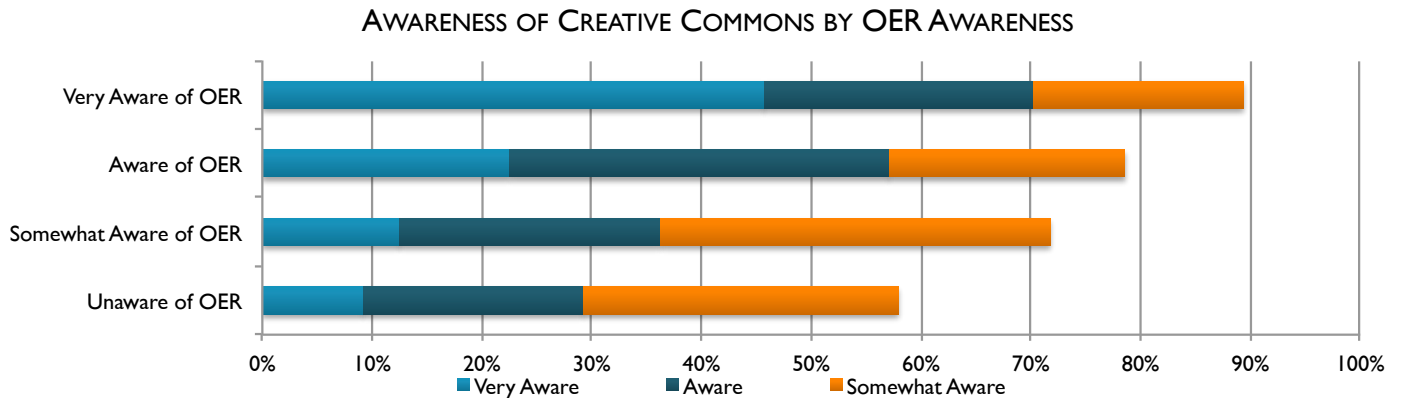
“I have used resources I find on the Internet, but I am mindful of copyright issues.” (Full-time Other Faculty)

The availability of open licensing and the ability to reuse and remix content is central to concept of open educational resources. Most faculty include the ability to remix content in their descriptions of OER, but less than a third include a Creative Commons license in their description. What does this say about how aware faculty are of some of the more common terms for licensing (Copyright, Public Domain, and Creative Commons)? Most faculty report that they are aware of copyright licensing of classroom content (77.6% “Very aware” or “Aware”) and public domain licensing (67.9% “Very aware” or “Aware”) but fall short on awareness of Creative Commons licensing. Less than two-thirds of faculty report that they are at least somewhat aware of Creative Commons licensing, with the remaining one-third saying that they are unaware.



While the level of awareness of Creative Commons might lag behind that of copyright and public domain, it is still about double the level of awareness of open educational resources. It appears that faculty have a much greater level of awareness of the type of licensing often used for OER than they do of OER itself. However, they do not always associate this licensing with OER.

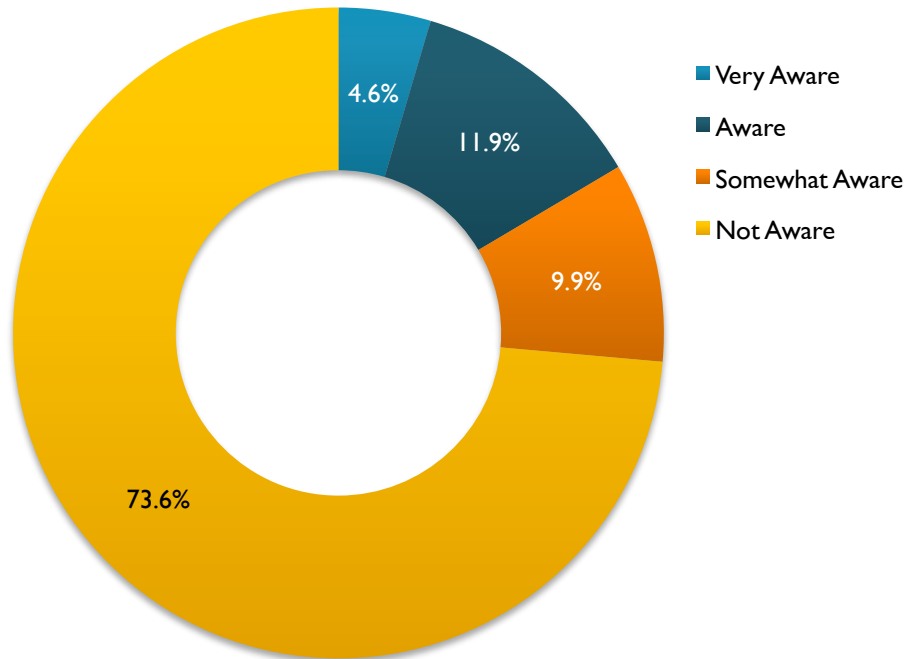
As might be expected, there is a strong relationship between awareness of open educational resources and awareness of Creative Commons licensing. Nearly 90% of those who report that they are aware of OER also report some level of awareness of Creative Commons licensing. The proportion of faculty who report that they are aware of Creative Commons among those who are unaware of OER is much lower at 58%, however it is still somewhat surprising that, of those unaware of OER, a majority claim to be aware of Creative Commons licensing.



As described earlier, faculty members may have only a “fuzzy” understanding and awareness of open educational resources. By asking additional questions about the related details, we can begin to understand how precise that understanding and awareness might be. Since licensing is so critical to the concept of OER, examining the difference between faculty who report that they are aware of OER and faculty who report that they are aware of *both* OER and Creative Commons licensing gives us a good indication of the depth of understanding of OER among faculty members. If faculty who report that they are unaware of Creative Commons licensing are removed for any of the “aware” categories of the measure of OER awareness, we create a much stricter index of OER awareness.

The level of OER awareness drops when we apply this stricter definition, but only somewhat. Those classified as “very aware” dips from 5.1% to 4.6%, “aware” from 15.2% to 11.9%, and “somewhat aware” from 13.8% to 9.9%. The overall proportion classified into any of the “aware” categories changes from 34.1% when awareness of Creative Commons is not required to 26.4% when it is required.

AWARENESS OF OPEN EDUCATIONAL RESOURCES AND CREATIVE COMMONS



Use of OER

“I like to use OERs when I can, but making sure the quality is good and finding good ones is time consuming.” (Full-time Other Faculty)

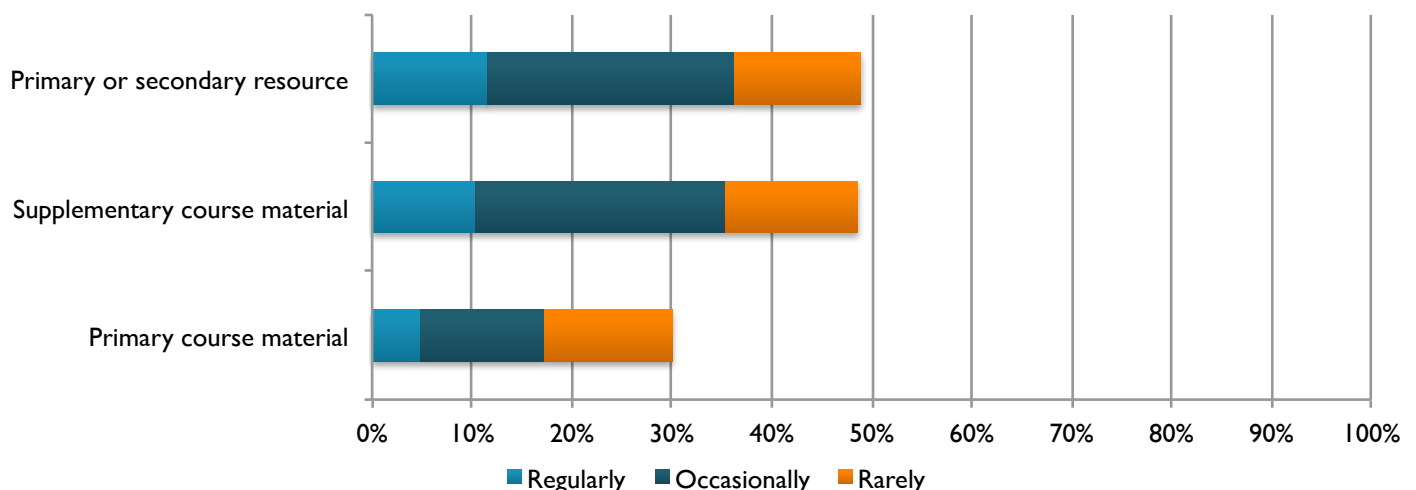
“There is so much material out there, and so little time available for searching, that it seems almost impossible to change from traditional to OER resources (it is always easier to stick with what you know).” (Full-time Natural Sciences Faculty)

Our previous report concluded that academic leaders are not a reliable source for knowing and reporting the level of OER use at their institutions. Because of their often-vague understanding of what constitutes OER and the decentralized decision making process for the adoption of teaching materials, they are not in a position to know what level of use is actually occurring at their institution. Thus it was not surprising that academic leaders’ reported level use of open educational resources in 2011 was not very high. Only one-half of all chief academic officers reported that any of the courses at their institution currently make use of OER materials. This is an especially low usage rate since the measure requires use of OER in only a single course at the institution to provide an affirmative response.

Faculty members, on the other hand, are central to the decision making process for the selection and adoption of educational resources, and can be expected to have a much more direct view of the situation. As noted above however, they also suffer from a less-than-perfect understanding of exactly what is and is not OER, so even these individuals will not always be able to give complete and accurate answers.

While only about one-third of faculty members claim to be aware of open educational resources, nearly one-half report that they use OER. There are even some faculty who said that they were not at all aware of OER who report that they have used it once the concept is explained for them. How is it that there are more faculty who are using OER than there are who say that they are aware of what it is? The answer appears to have two causes: the (lack of) faculty understanding of the term of “Open Educational Resources,” and the fact that faculty often make resource choices without any consideration to the licensing of that resource.

FACULTY USE OF OPEN EDUCATIONAL RESOURCES



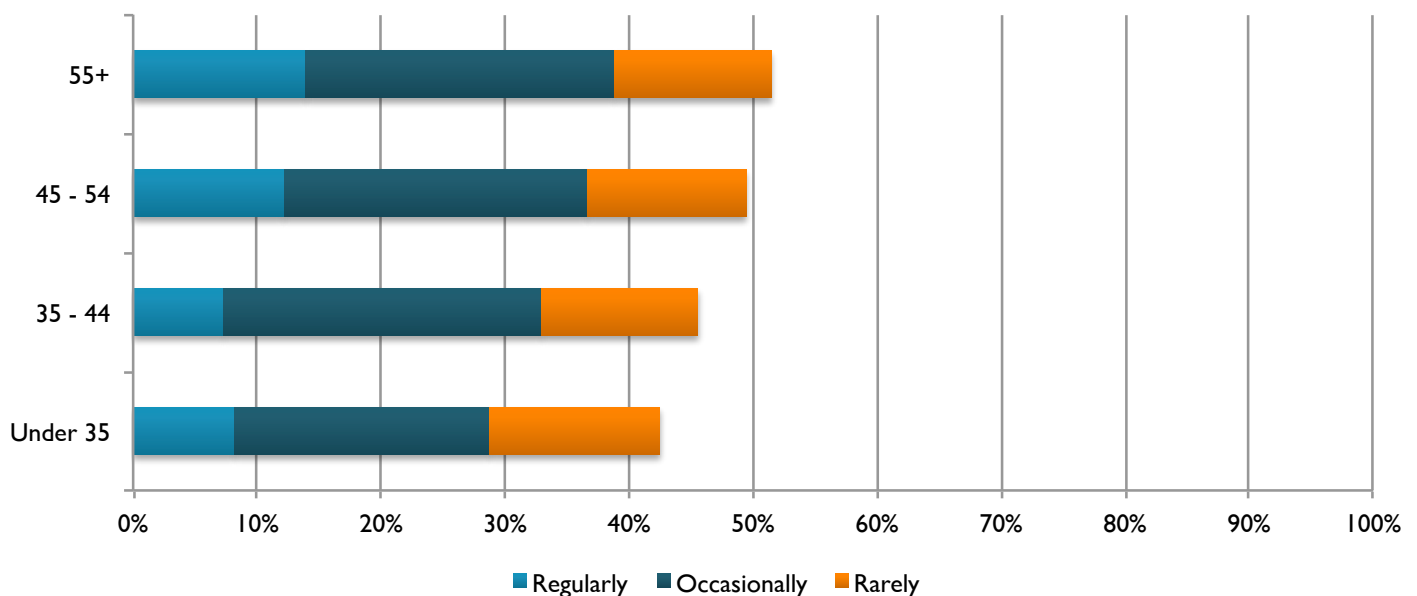
In what ways might faculty be over-reporting their use of OER? Faculty have a good understanding and appreciation of the concepts of OER (e.g., open licensing, free, reuse and remixing), but many do not associate these aspects with the term OER. The issue is not so much that faculty have a different understanding of OER, but rather that they make resource decisions unaware of these issues. Adopting a “free” resource, unaware of its licensing terms, may easily be classified as OER in their mind. That resource might be OER, or, depending on its licensing terms, it might not be.

Nearly one-half (49%) of all faculty report using OER as supplemental course material, with 30% saying that they use it as primary material. Virtually all those who use OER as primary material also use it as a supplemental resource, so the total of those who use OER in either capacity is the same 49% as use it in a supplemental fashion.

Among faculty who reported that they were aware of OER, 79% say that they use it in some capacity. More surprising is that one-third of faculty who said they were unaware of OER report that they use OER. Only some faculty appear to be aware of OER as a term, but once presented with a definition and explanation, greater numbers say that they are making use of these resources.

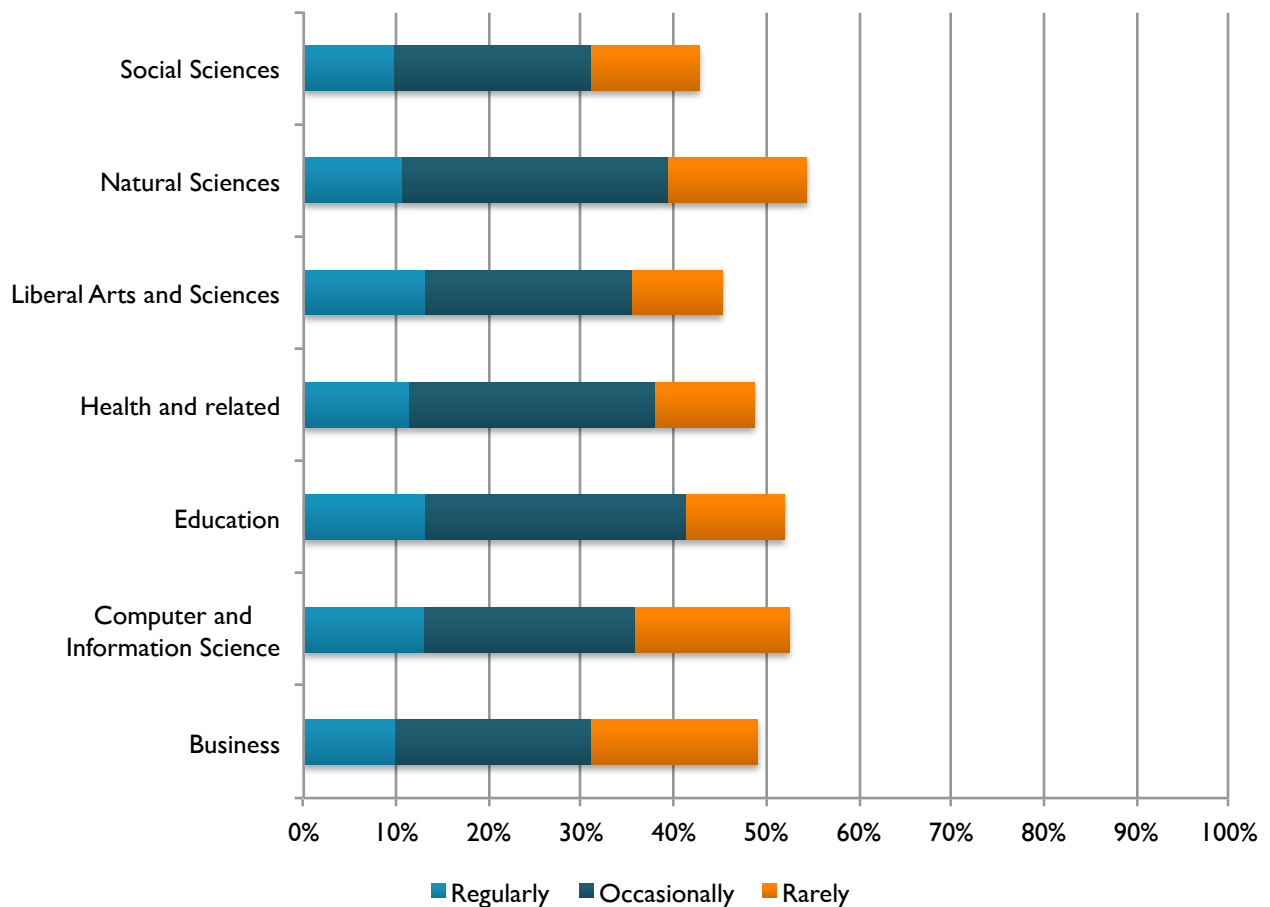
The pattern of Open Educational Resource use by age follows the same pattern as observed for awareness of OER: older faculty have the highest rates of use with the youngest faculty have the lowest rates. One possible explanation for this is that older faculty already have tenure and are more comfortable integrating OER into their courses than younger, untenured faculty.

OPEN EDUCATIONAL RESOURCE USE AS PRIMARY OR SECONDARY RESOURCE

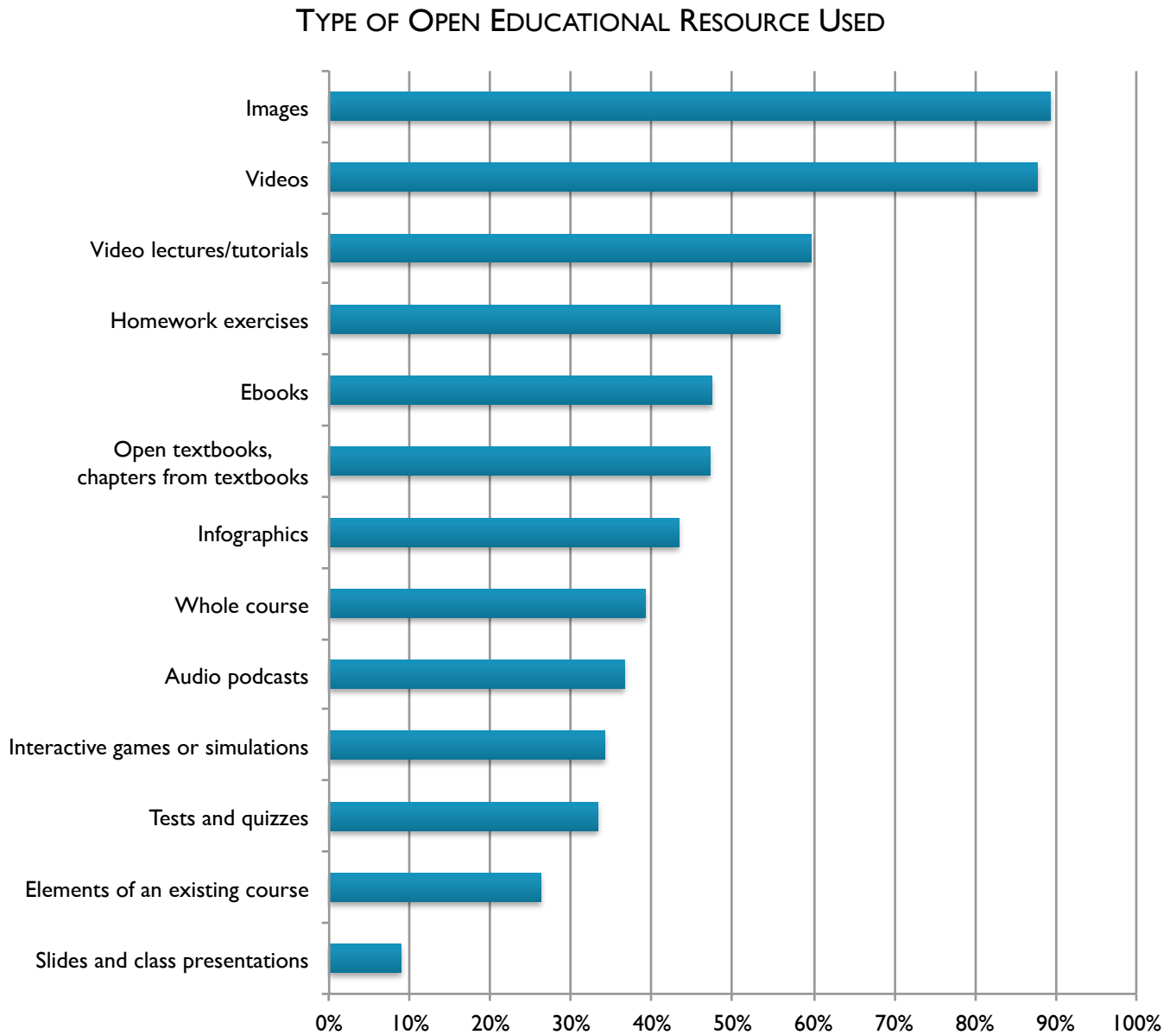


Use of open educational resources is relatively consistent across disciplines. Faculty in the Natural Sciences do not have the highest level reporting that they use OER “regularly,” but do have the greatest proportion reporting some level of use. Faculty in Social Sciences, on the other hand, report both the lowest level of regular use and the lowest overall level of use. The difference between these two ends of the OER use spectrum is not very large.

OPEN EDUCATIONAL RESOURCE USE AS PRIMARY OR SECONDARY RESOURCE



Faculty that reported any OER use (regularly, occasionally, or rarely) were asked detailed questions about the type of OER materials that they were using. Almost 90% of faculty using OER reported that they use images and videos (89.3% and 87.8% respectively). These were followed by video lectures/tutorials and homework exercises. Most of the remaining resources types were used by between 30% and 50% of faculty who used any OER. Least likely to be used were slides and class presentations (8.9%).



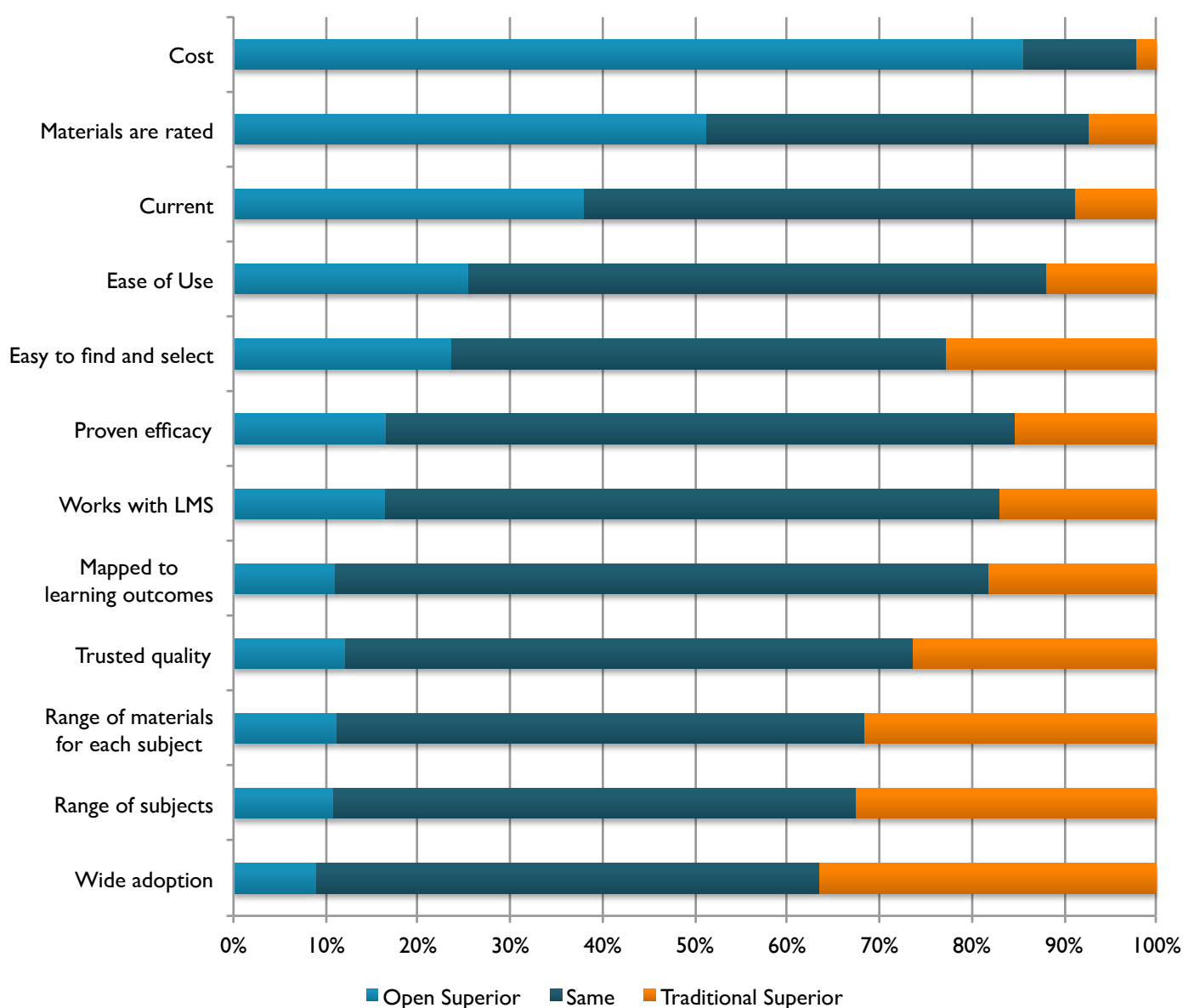
Comparison of OER to Traditional Resources

“Increasing concern about the cost of course materials makes OER a more attractive option. I find that more and more ‘traditional’ resources are also available for free on the Internet so I’m not sure the difference between the two forms is as significant as it might seem.” (Full-time Social Sciences Faculty)

“OER materials I have seen in the past for my subject (graphic design) are poorly built, shoddily made, and of low quality.” (Full-time Other Faculty)

Faculty who were aware of open educational resources were asked to compare OER with traditional resources on a number of dimensions, noting where they thought OER to be superior, where they considered the two types of resources to be the same, and where OER was inferior to traditional resources.

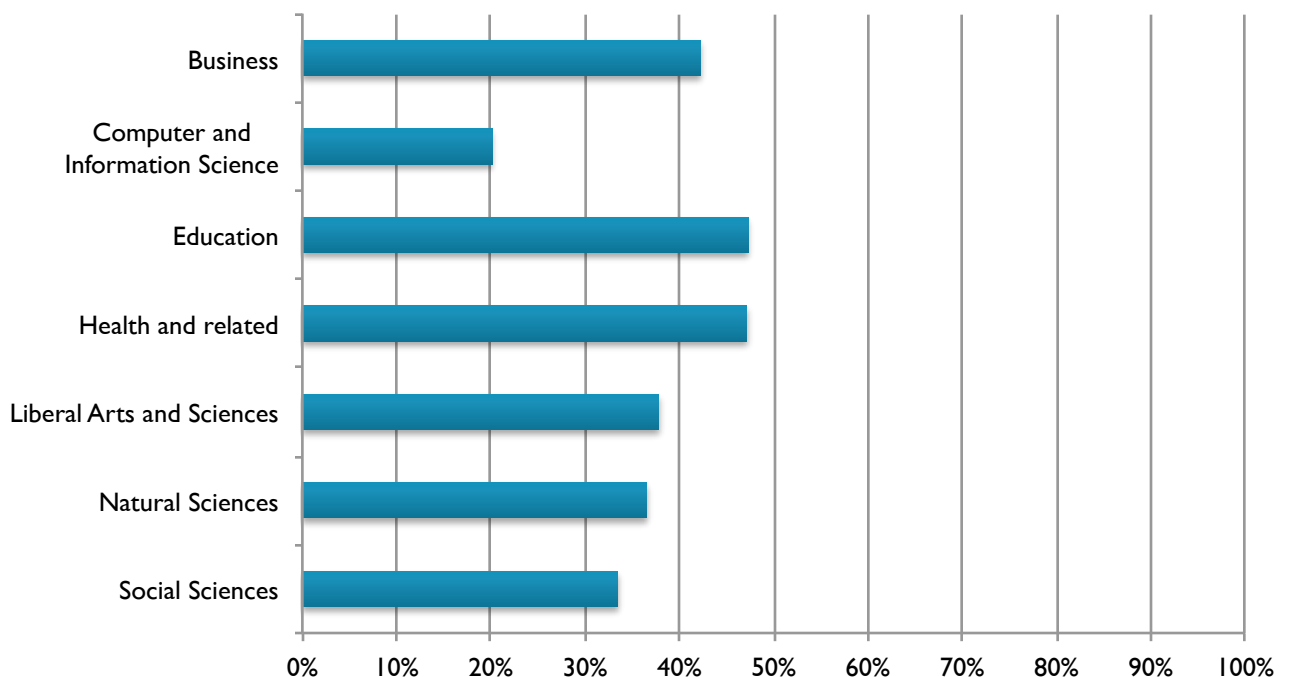
OPEN EDUCATIONAL RESOURCES COMPARED TO TRADITIONAL RESOURCES



The one clear area where OER was rated as superior was the dimension of cost, where 85.7% of faculty considered OER to be superior. OER was also rated higher than traditional resources when faculty considered the availability of ranking for the materials (51.3% reporting OER superior), how current the materials were (38%), and ease of use. Several dimensions, including “easy to find and select,” “proven efficacy,” and “works with LMS,” were rated roughly equal between the two types of resources. Traditional resources were seen as superior for the remaining dimensions: “mapped to learning outcomes,” “trusted quality,” “range of materials,” “range of subjects,” and “wide adoption.”

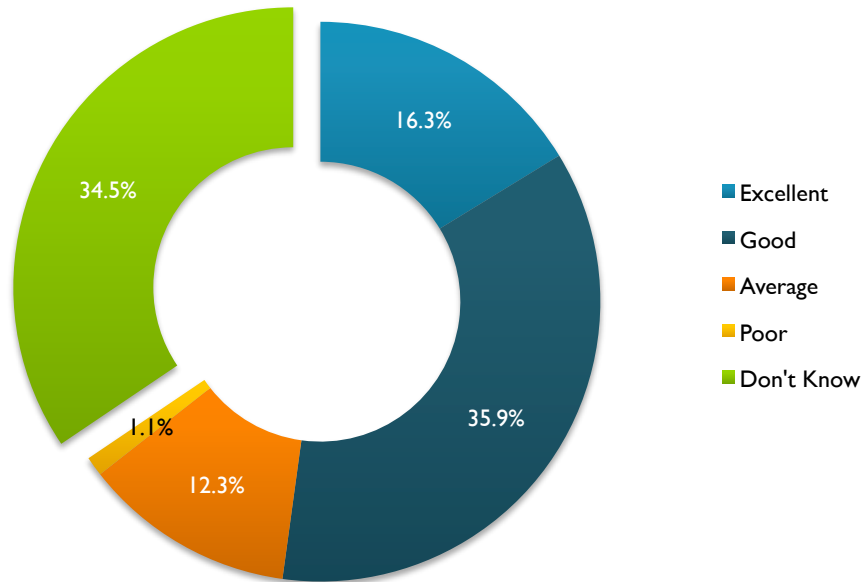
There was little difference among different disciplines in the ratings for most of the dimensions examined; all rated the OER as superior on cost, for example. Faculty in different disciplines had differing views on whether or not OER material was superior to traditional materials by being more current. Faculty in computer and information sciences were the least likely to report this (20.1% saying OER was superior), while those in health and education were the most likely to report this (47.1% and 47.3% respectively).

OPEN EDUCATIONAL RESOURCES MORE CURRENT THAN TRADITIONAL RESOURCES



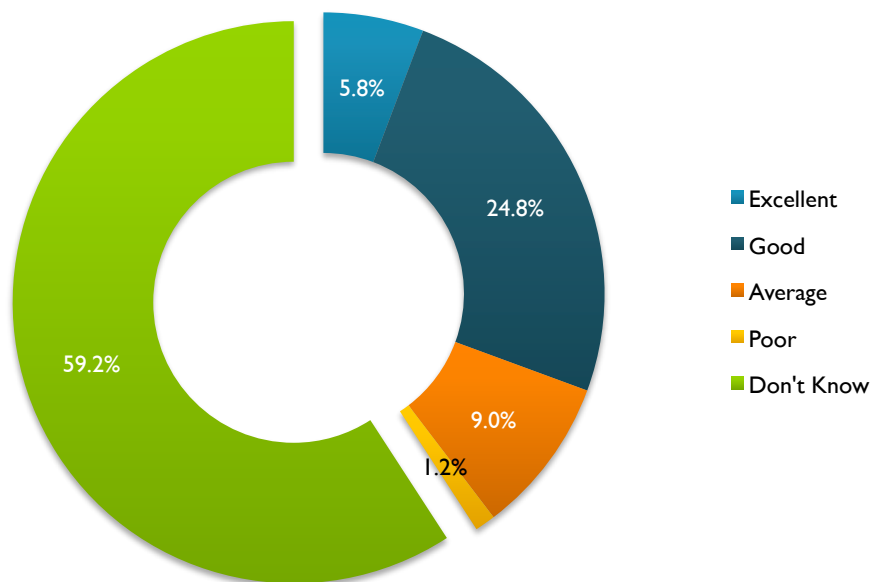
Faculty were also asked to compare the perceived quality of open educational resources to traditional resources. Using a four point scale of excellent, good, average, and poor, the majority of teaching faculty rated traditional resources as either excellent or good, but over one-third of faculty reported that they could not rate the quality of traditional resources.

QUALITY OF TRADITIONAL PUBLISHERS



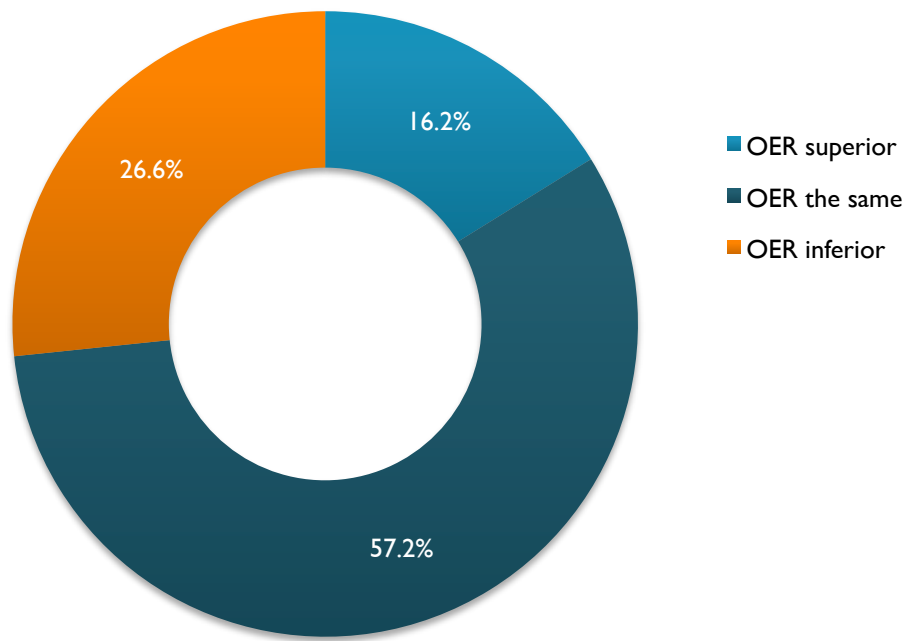
An even larger portion of faculty members reported that they were unable to judge the quality of open educational resources (59.2%). Similar to the results for traditional resources, the largest group of faculty with an opinion rated the quality of OER as “good,” but a relatively smaller portion gave OER the highest “excellent” rating.

QUALITY OF OPEN EDUCATIONAL RESOURCES



Comparing the ratings of faculty for both traditional and open educational resources shows how faculty rank each type of resource relative to the other. Only a minority of faculty could provide a rating for the quality of OER materials, so this comparison is only possible for this subset of faculty members. A majority of these faculty (57.2%) ranked the two resources types equal in quality, with slightly over a quarter reporting a higher ranking for the traditional resource as compared to OER. A smaller but still significant group of faculty (16.2%) ranked OER quality higher than that of traditional resources. For the subset of faculty with sufficient exposure to both traditional and OER it appears that there is preference for the quality of traditional resources, but this preference is not large. Nearly three-quarters of faculty consider the quality of open educational resources to be the same as or better than that of traditional resources.

RELATIVE QUALITY OF OPEN EDUCATIONAL RESOURCES



Potential Barriers

“Primary reason for not using Open Resource is the time commitment - the hours spent finding, reviewing, selecting, modifying and implementing these resources.” (Full-time Arts and Literature Faculty)

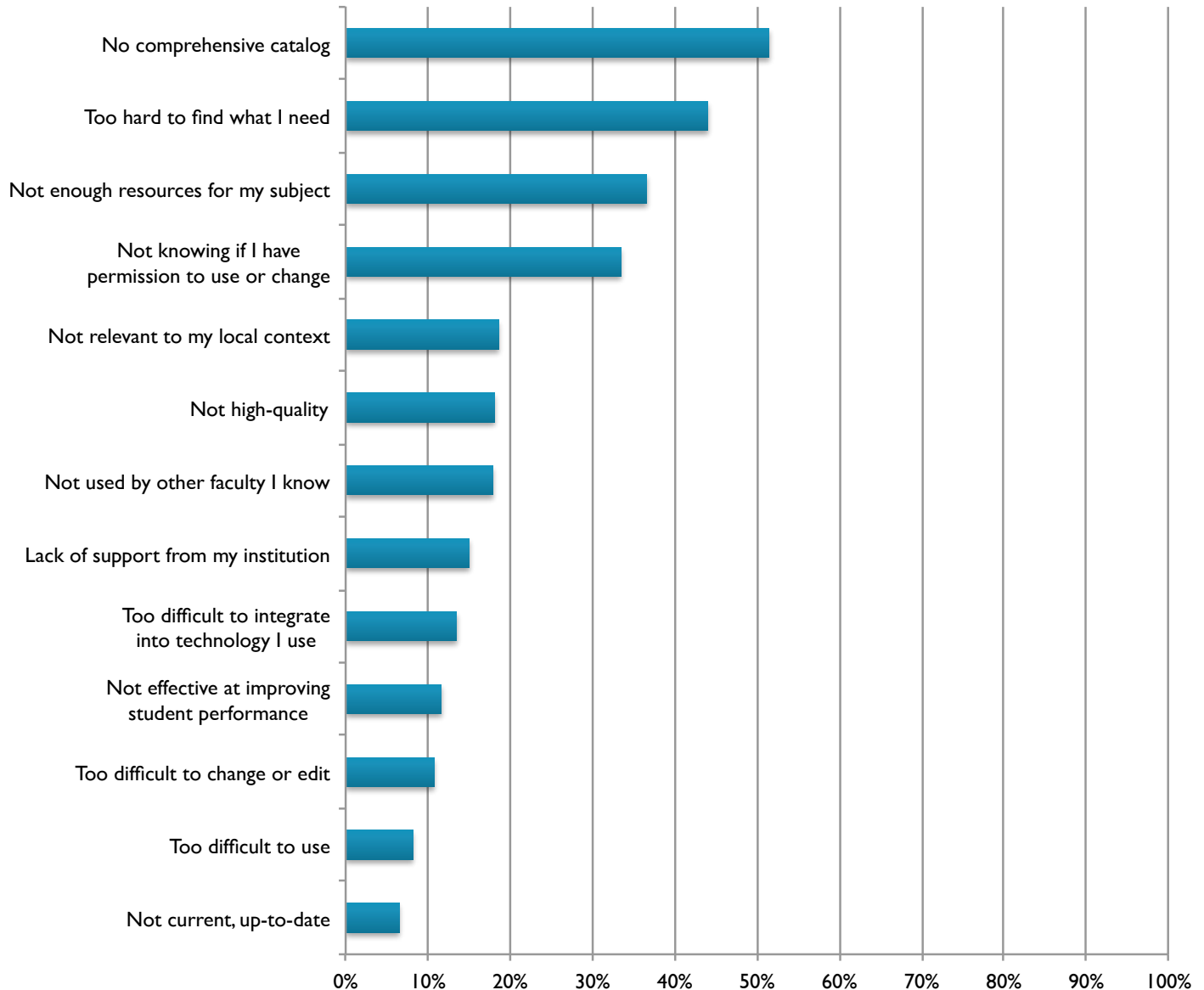
“The main obstacle to using OER for me is the required investment in time to integrate with existing course materials (lecture notes, recitation exercises, etc.) that I have developed.” (Full-time Natural Sciences Faculty)

“Many educators are enthusiastic and interested in new technologies but do not have the time to develop them themselves; we need to know where to go for high-quality resources that will fit with our course goals and that can be easily adopted by us and our students.” (Full-time Education Faculty)

Open educational resources are not seen as particularly problematic, with the previous study showing very low levels of concern among academic leaders. It was unclear whether this was due to these leaders not having any real concerns about OER, or if their less-than-perfect understanding of OER meant that they did not perceive potential barriers. Leaders did express that OER would be more useful if there was a single clearinghouse. Academic leaders at institutions with online offerings had the highest level of awareness of OER and the saw the greatest potential value and potential time savings from it, but also expressed the greatest interest in a single clearinghouse.

Current results for faculty members mirror the concerns of the academic leaders, with more than half of the faculty aware of or using OER stating that the lack of a comprehensive catalog of resources is a barrier to OER use (51.5% and 57.5%, respectively). The lack of a catalog and the difficulty of finding what is needed are the most often cited barriers. All three of the most mentioned barriers are related to the ease of finding appropriate material. This corresponds very closely to previous findings, where faculty listed the time and effort to find and evaluate these resources as the most important barrier to adopting OER. A majority of faculty reported that difficulty in searching and the lack of a comprehensive catalog on OER materials were important barriers to their use of OER.

DETERRENTS TO ADOPTING OPEN EDUCATIONAL RESOURCES



Concern about licensing and its constraints on potential use and adaption was the fourth most mentioned barrier to OER adoption. The level of concern drops considerably after these top four issues. Most faculty that are aware of OER report that they have little concern that OER is up-to-date, easy to use and edit, or easy to integrate into the technology they are currently using.

Discoverability

“I'd like open sources to be easier to find. I'm not sure how, but I'd need a portal, hub, or other means to search and find quickly.” (Part-time Arts and Literature Faculty)

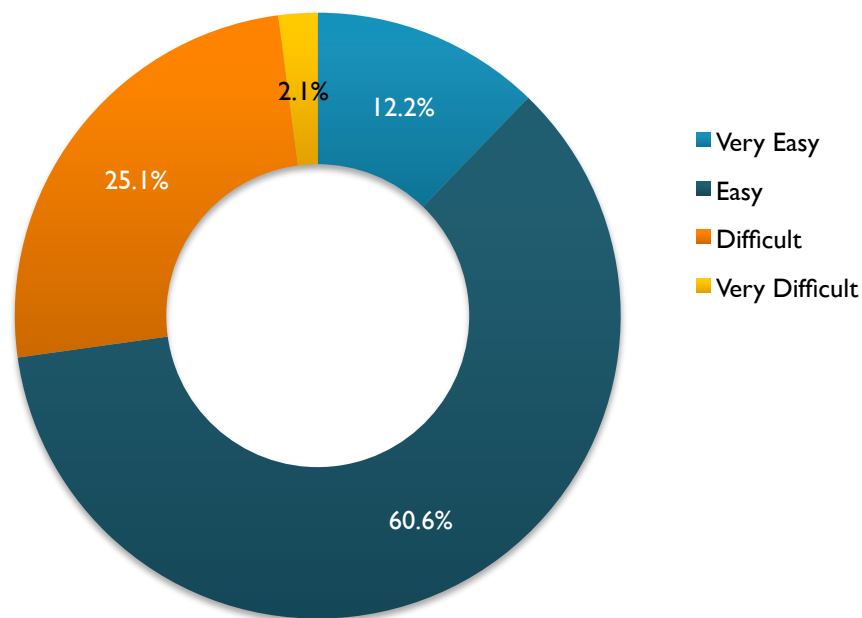
“It would be very useful to have a consolidated inventory or catalog of available OER materials, searchable by discipline or by interdisciplinary fields.” (Full-time Law Faculty)

“I think we need more options and directions to make best use of technologies - a repository of sorts.” (Full-time Other Faculty)

Given that the top three barriers that faculty cite impacting their adoption of open educational resources are related to the ease of finding and selecting the appropriate resource, it is important to understand how this dimension compares to ease of finding and selecting the more traditional resources that faculty are already using. How much more difficult is the search and adoption process for OER? To address this question, faculty were asked to rate how difficult it was to search for traditional resources using a four-point scale, and then asked the same question relative to searching open educational resources.

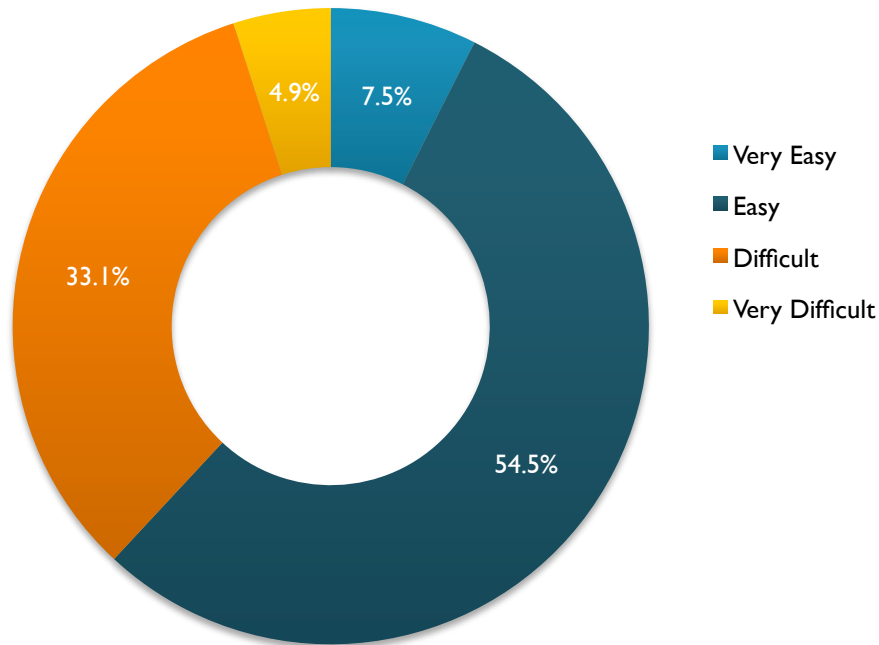
Nearly three-quarters of faculty reported that searching for resources from traditional publishers was “easy” or “very easy” with one-quarter saying it was “difficult.” Only very few faculty (2.1%) considered the ease of search for resources from traditional publishers to be “very difficult.”

EASE OF SEARCHING TRADITIONAL PUBLISHERS



While a majority of faculty considered the ease of searching open educational resources to be “easy” or “very easy” this is still less than the proportion who rated traditional publishers in these categories. One-third of faculty reported that it is “difficult” to search OER, compared to the one-quarter who gave traditional publishers this rating. The proportion rating ease of searching OER as “very difficult” is low at 4.9%, but this is still double the percentage that rates traditional publishers in this category.

EASE OF SEARCHING OPEN EDUCATIONAL RESOURCES



The level of effort in searching for OER reported by faculty is only slightly more difficult than the effort that they perceive in searching for traditional resources, so why is it that issues of finding and evaluating OER tops faculty’s list of potential barriers for OER adoption? The answer appears to be that faculty see barriers for the adoption of *any* new teaching resource – OER or traditional. The effort to find and evaluate new resources (of any kind) and integrate them into the curriculum is substantial. Over a quarter of faculty see this as “difficult” or “very difficult” for traditional resources – even with their well-established mechanisms and considerable faculty experience with the process. Moving to an OER, where the faculty member is far less familiar and the cataloging and search mechanism less well developed only make this issue more important. It is perhaps more surprising how close faculty rate the discoverability of OER as compared to traditional resources than it is that discoverability and evaluation are the most-cited barriers.

Future Use

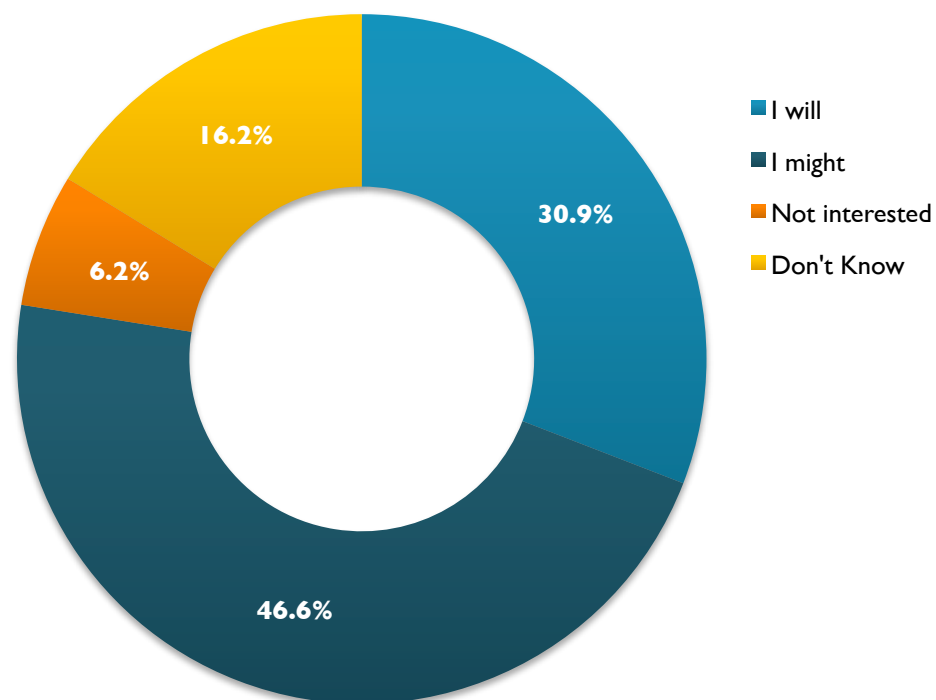
"I am certainly interested in the possibilities that OER present both for faculty and students alike. I think the idea of allowing students to select most of the materials to be covered in the course from an OER has definite potential to both impart greater levels of ownership and reduce overall cost." (Full-time Arts and Literature Faculty)

"I like the idea of OER. I think it should free up a lot of time that could be used for improving the overall quality of teaching and learning." (Full-time Computer and Information Science Faculty)

"It confirms my belief that while traditional teaching methods are still important, other resources such as OER will become more important due to the changing times and global economy." (Part-time Business Administration Faculty)

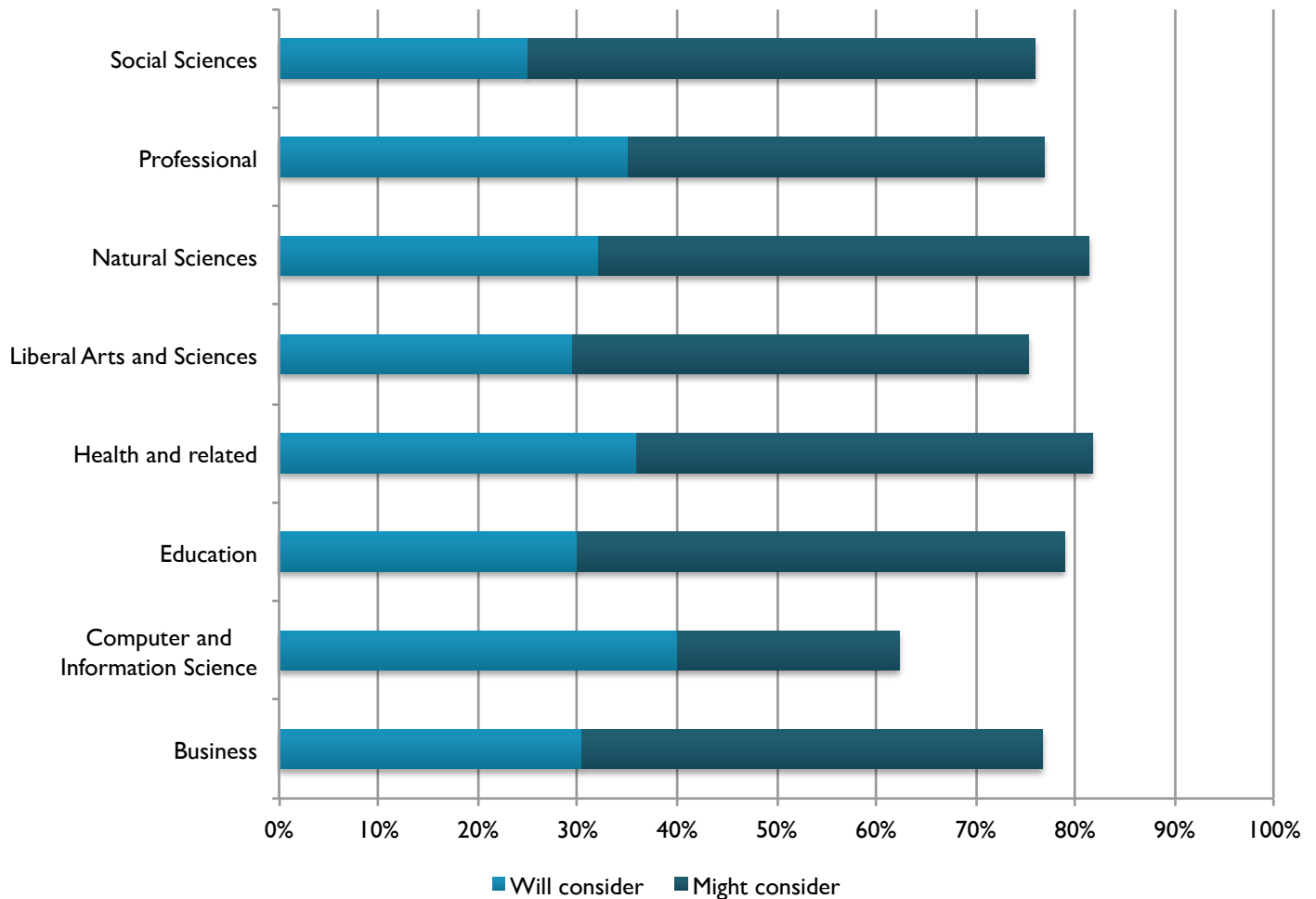
Based on the results of the survey, the use of OER may potentially increase greatly over the next three years. When faculty members that are not current users of open educational resources were asked if they expected to be using OER in the next three years, a majority (77.5%) reported that they either expected to use OER or would consider consider using OER.

USE OPEN EDUCATIONAL RESOURCES IN THE NEXT THREE YEARS?



There is little difference in the percent of respondents predicting that they will use or will consider using OER over the next three years by specific discipline. Faculty in Health-related disciplines and the Natural Sciences both have proportions over 80% (81.8% and 81.5%, respectively) while faculty in Computer and information science were the lowest, but still a majority, at 62.3%.

USE OPEN EDUCATIONAL RESOURCES IN THE NEXT THREE YEARS?



SURVEY METHODOLOGY

A nationally representative faculty sample is used in this analysis – designed to be representative of the overall range of faculty teaching in U.S. higher education. A multiple-stage selection process was used for creating a stratified sample of all teaching faculty. The process began by obtaining data from a commercial source, Market Data Retrieval⁶, which has over one and a half million faculty records and claims that its records represent 93% of all teaching faculty. All teaching faculty (defined as having at least one course code associated with their records) were selected for this first stage. Faculty were then randomly selected from the master list in proportion to the number contained in each Carnegie Classification to produce a second-stage selection of teaching faculty members. This sample was then checked against opt-out lists, as well as for non-functioning email addresses. Approximately 12% of all email addresses were removed at this stage. The number of email addresses that were still receiving mail but no longer actively being used by the individual being addressed (e.g., moved or retired) is unknown. Spam filters at both the institution and the individual level also captured an unknown proportion of these emails.

A total of 2,144 faculty responded to the survey, 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). Almost three-quarters of the respondents report that they are full-time faculty members. Just under one-quarter teach online, and they are evenly split between male and female, and 28% have been teaching for 20 years or more.

Institutional descriptive data come from the College Board Annual Survey of Colleges and from the National Center for Educational Statistics' IPEDS database⁷. After the data were compiled and merged with the College Board Annual College Survey⁸ and IPEDS database, responders and nonresponders were compared to ensure that the survey results reflected the characteristics of the entire population of schools. The responses are compared for 35 unique categories based on the 2005 Carnegie Classification of Institutions of Higher Education.

⁶ <http://schooldata.com/wordpress/wp-content/uploads/2014/06/MDR-Education-Catalog.pdf>

⁷ <http://nces.ed.gov/ipeds/datacenter/>

⁸ Portions of the data used for this report were collected by The College Board as part of the Annual Survey of Colleges and is Copyright © 2013-2014 The College Board.

APPENDIX TABLES

Who are the OER Gatekeepers?

FACULTY HAVE A ROLE IN SELECTING EDUCATIONAL RESOURCES - LEVEL OF INSTITUTION

	Yes	No
Four year	94.7%	5.3%
Two year	80.5%	19.5%

FACULTY HAVE A ROLE IN SELECTING EDUCATIONAL RESOURCES - CARNEGIE CLASSIFICATION

	Yes	No
Associates	80.7%	19.3%
Doctoral/Research	95.5%	4.5%
Masters	94.1%	5.9%
Baccalaureate	95.3%	4.7%
Specialized	92.9%	7.1%

FACULTY HAVE A ROLE IN SELECTING EDUCATIONAL RESOURCE - INSTITUTIONAL CONTROL

	Yes	No
Public	90.1%	9.9%
Private not-for-profit	95.8%	4.2%
Private for-profit	72.5%	27.5%

FACULTY MEMBER HAS PRIMARY ROLE IN SELECTING EDUCATIONAL RESOURCES - DISCIPLINE

	<i>Faculty has Primary Role</i>
Health and related	74.2%
Business	77.3%
Natural Sciences	79.0%
Education	79.6%
Computer and Information Science	83.9%
Professional	84.2%
Liberal Arts and Sciences	86.7%
Social Sciences	91.5%

MOST IMPORTANT CRITERIA FOR SELECTING TEACHING RESOURCES

	<i>Selected</i>	<i>No</i>
Cost	2.7%	97.3%
Faculty ratings	2.6%	97.4%
Provided by my institution	2.9%	97.1%
Up to date	3.6%	96.4%
Ready to use	6.3%	93.7%
Easy to find and select	8.3%	91.7%
Easy to adapt	14.4%	85.6%
Comprehensive range of materials	14.3%	85.7%
Mapped to learning outcomes	19.0%	81.0%
Ease of use	19.2%	80.8%
Wide adoption	20.4%	79.6%
Works with LMS	34.8%	65.2%
Cover a wide range of subjects	40.9%	59.1%
Trusted quality	50.1%	49.9%
Proven efficacy	59.6%	40.4%

Awareness of Open Educational Resources

AWARENESS OF OPEN EDUCATIONAL RESOURCES

<i>I am very aware of OER and know how they can be used in the classroom</i>	<i>I am aware of OER and some of their use cases</i>	<i>I am somewhat aware of OER but I am not sure how they can be used</i>	<i>I have heard of OER, but don't know much about them</i>	<i>I am not aware of OER</i>
5.1%	15.2%	13.8%	65.9%	34.4%

AWARENESS OF OPEN EDUCATIONAL RESOURCE - AGE

	Very Aware	Aware	Somewhat Aware
Under 35	6.7%	11.8%	7.9%
35 - 44	4.2%	15.3%	12.5%
45 - 54	5.6%	12.3%	14.3%
55+	4.8%	17.7%	15.1%

AWARENESS OF OPEN EDUCATIONAL RESOURCES - DISCIPLINE

	Very Aware	Aware	Somewhat Aware
Business	2.3%	11.6%	17.5%
Computer and Information Science	13.0%	16.4%	9.8%
Education	6.9%	17.0%	10.2%
Health and related	1.9%	21.8%	18.1%
Liberal Arts and Sciences	6.5%	13.8%	13.6%
Natural Sciences	5.1%	16.4%	14.0%
Social Sciences	2.4%	12.0%	11.4%

AWARENESS OF OPEN EDUCATIONAL RESOURCES - LEVEL OF INSTITUTION

	Very Aware	Aware	Somewhat Aware
Four year school	4.5%	14.0%	13.7%
Two year school	7.4%	19.7%	13.6%

FACULTY DESCRIPTION OF OPEN EDUCATIONAL RESOURCES

	Would Include	May or May Not Include	Not Include
Creative Commons license	28.0%	48.2%	23.7%
More up to date than textbooks	34.7%	49.7%	15.6%
High quality	40.2%	47.6%	12.2%
Easy to modify	44.2%	44.6%	11.2%
Easy to combine with other materials	54.0%	38.9%	7.1%
Ability to remix and repurpose	54.2%	36.9%	8.9%
Is available for free	71.4%	25.2%	3.4%

FACULTY DESCRIPTION OF OPEN EDUCATIONAL RESOURCES - OER USE AND OER AWARENESS

	All faculty	Aware of OER	OER users
Creative Commons license	28.0%	33.6%	30.8%
More up to date than textbooks	34.7%	34.2%	39.1%
High quality	40.2%	41.0%	45.3%
Easy to modify	44.2%	41.2%	44.9%
Easy to combine with other materials	54.0%	59.3%	62.2%
Ability to remix and repurpose	54.2%	58.4%	57.2%
Is available for free	71.4%	76.2%	77.4%

Awareness of Licensing of Open Educational Resources

FACULTY AWARENESS OF LICENSING

	<i>Very Aware</i>	<i>Aware</i>	<i>Somewhat Aware</i>	<i>Unaware</i>
Creative Commons	13.5%	22.9%	28.0%	35.6%
Public Domain	26.5%	41.4%	24.8%	7.3%
Copyright	35.3%	42.3%	19.0%	3.4%

AWARENESS OF CREATIVE COMMONS BY OER AWARENESS

	<i>Very Aware</i>	<i>Aware</i>	<i>Somewhat Aware</i>
Unaware of OER	9.2%	20.0%	28.7%
Somewhat Aware of OER	12.5%	23.8%	35.5%
Aware of OER	22.5%	34.5%	21.5%
Very Aware of OER	45.7%	24.5%	19.1%

Use of OER

FACULTY USE OF OPEN EDUCATIONAL RESOURCES

	<i>Regularly</i>	<i>Occasionally</i>	<i>Rarely</i>	<i>Never / NA</i>
Primary course material	4.8%	12.5%	12.8%	69.9%
Supplementary course material	10.4%	25.0%	13.2%	51.4%
Primary or secondary resource	11.6%	24.7%	12.7%	51.1%

OPEN EDUCATIONAL RESOURCE PRIMARY OR SECONDARY USE - AGE

	<i>Regularly</i>	<i>Occasionally</i>	<i>Rarely</i>	<i>Never / NA</i>
Under 35	8.2%	20.5%	13.7%	57.5%
35 - 44	7.3%	25.7%	12.6%	54.5%
45 - 54	12.2%	24.5%	12.8%	50.6%
55+	13.9%	24.9%	12.7%	48.5%

OPEN EDUCATIONAL RESOURCE USE AS PRIMARY OR SECONDARY RESOURCE - DISCIPLINE

	<i>Regularly</i>	<i>Occasionally</i>	<i>Rarely</i>	<i>Never / NA</i>
Business	10.0%	21.1%	18.0%	50.9%
Computer and Information Science	13.0%	22.9%	16.6%	47.5%
Education	13.1%	28.2%	10.6%	48.0%
Health and related	11.5%	26.6%	10.7%	51.3%
Liberal Arts and Sciences	13.1%	22.4%	9.7%	54.8%
Natural Sciences	10.7%	28.7%	15.0%	45.6%
Social Sciences	9.8%	21.2%	11.7%	57.2%

TYPE OF OPEN EDUCATIONAL RESOURCE USED

	<i>Yes</i>	<i>No</i>
Slides and class presentations	8.9%	10.7%
Elements of an existing course	26.2%	12.2%
Tests and quizzes	33.3%	40.3%
Interactive games or simulations	34.1%	44.2%
Audio podcasts	36.6%	52.6%
Whole course	39.2%	52.8%
Infographics	43.3%	56.7%
Open textbooks, chapters from textbooks	47.2%	60.8%
Ebooks	47.4%	63.4%
Homework exercises	55.8%	65.9%
Video lectures/tutorials	59.7%	66.7%
Videos	87.8%	73.8%
Images	89.3%	91.1%

Comparison of OER to Traditional Resources

OPEN EDUCATIONAL RESOURCES COMPARED TO TRADITIONAL RESOURCES

	<i>Open Resources Superior</i>	<i>About the Same</i>	<i>Traditional Resources Superior</i>
Wide adoption	9.0%	54.5%	36.5%
Range of subjects	10.8%	56.7%	32.5%
Range of materials for each subject	11.2%	57.1%	31.6%
Trusted quality	12.1%	61.5%	26.3%
Mapped to learning outcomes	11.0%	70.8%	18.2%
Works with LMS	16.5%	66.5%	17.0%
Proven efficacy	16.5%	68.2%	15.3%
Easy to find and select	23.6%	53.6%	22.8%
Ease of Use	25.5%	62.6%	11.9%
Current	38.0%	53.2%	8.8%
Materials are rated	51.3%	41.4%	7.3%
Cost	85.7%	12.2%	2.1%

OPEN EDUCATIONAL RESOURCES MORE CURRENT THAN TRADITIONAL RESOURCES - DISCIPLINE

	<i>Open Resources Superior</i>	<i>About the Same</i>	<i>Traditional Resources Superior</i>
Social Sciences	33.4%	53.6%	12.9%
Natural Sciences	36.5%	59.0%	4.4%
Liberal Arts and Sciences	37.8%	50.5%	11.7%
Health and related	47.1%	52.9%	0.0%
Education	47.3%	52.7%	0.0%
Computer and Information Science	20.1%	46.7%	33.2%
Business	42.3%	43.2%	14.6%

QUALITY OF TRADITIONAL PUBLISHERS

<i>Excellent</i>	<i>Good</i>	<i>Average</i>	<i>Poor</i>	<i>Don't Know</i>
16.3%	35.9%	12.3%	1.1%	34.5%

QUALITY OF OPEN EDUCATIONAL RESOURCES

<i>Excellent</i>	<i>Good</i>	<i>Average</i>	<i>Poor</i>	<i>Don't Know</i>
5.8%	24.8%	9.0%	1.2%	59.2%

RELATIVE QUALITY OF OPEN EDUCATIONAL RESOURCES

<i>OER superior</i>	<i>OER the same</i>	<i>OER inferior</i>
16.2%	57.2%	26.6%

Potential Barriers

DETERRENTS TO ADOPTING OER

	Selected	No
Not current, up-to-date	6.5%	93.5%
Too difficult to use	8.2%	91.8%
Too difficult to change or edit	10.8%	89.2%
Not effective at improving student performance	11.6%	88.4%
Too difficult to integrate into technology I use	13.5%	86.5%
Lack of support from my institution	15.0%	85.0%
Not used by other faculty I know	17.9%	82.1%
Not high-quality	18.1%	81.9%
Not relevant to my local context	18.6%	81.4%
Not knowing if I have permission to use or change	33.5%	66.5%
Not enough resources for my subject	36.6%	63.4%
Too hard to find what I need	44.0%	56.0%
No comprehensive catalog	51.5%	48.5%

Discoverability

EASE OF SEARCHING - TRADITIONAL PUBLISHERS

Very Easy	Easy	Difficult	Very Difficult
12.2%	60.6%	25.1%	2.1%

EASE OF SEARCHING - OPEN EDUCATIONAL RESOURCES

Very Easy	Easy	Difficult	Very Difficult
7.5%	54.5%	33.1%	4.9%

Future Use

USE OPEN EDUCATIONAL RESOURCES IN THE NEXT THREE YEARS?

<i>No opinion /Don't know</i>	<i>I will consider using Open Educational Resources</i>	<i>I might consider using Open Educational Resources</i>	<i>I am not interested in using Open Educational Resources</i>
30.9%	46.6%	6.2%	16.2%

USE OPEN EDUCATIONAL RESOURCES IN THE NEXT THREE YEARS?

	<i>Will consider</i>	<i>Might consider</i>	<i>Not interested</i>	<i>No opinion /Don't know</i>
Business	30.4%	46.3%	4.5%	18.8%
Computer and Information Science	40.0%	22.3%	23.6%	14.0%
Education	30.0%	49.0%	3.0%	18.0%
Health and related	35.9%	45.9%	4.0%	14.2%
Liberal Arts and Sciences	29.5%	45.8%	8.2%	16.4%
Natural Sciences	32.1%	49.4%	3.5%	15.1%
Professional	35.1%	41.9%	0.0%	23.1%
Social Sciences	25.0%	51.0%	6.3%	17.8%

APPENDIX: QUESTIONNAIRE

Welcome.

Thank you for participating in our study on the role of technology in teaching in U.S. higher education.

Primary support for this research comes from The William and Flora Hewlett Foundation. The survey is being conducted in collaboration with Babson Survey Research Group (BSRG) at Babson College. Only aggregated data will be reported and no contact information is shared with other organizations. Report sponsors do not have access to individual-level responses.

All respondents will receive copies of the study reports.

Please tell us a bit about yourself. Note: This information is used only to classify the survey responses. No individual-level data will be released. Information that you provide in this survey will not be used to target you for any marketing.

Your status:

Gender

- ☐ Male
- ☐ Female

Teaching Status

- ☐ Part-time
- ☐ Full-time

Number of Years Teaching

DROPDOWN LIST:

Less than 1

1 to 3

4 to 5

6 to 9

10 to 15

16 to 20

More than 20

Tenure Status

DROPDOWN LIST:

N/A

Tenured

Tenure track, not tenured

Not tenure track

Your primary discipline

DROPDOWN LIST:

Arts and Literature
Business Administration
Computer and Information Science
Economics
Education
Engineering
Humanities
Law
Linguistics / Language
Mathematics
Medicine
Natural Sciences
Philosophy
Psychology
Social Sciences
Other

Your Age

- ☐ Under 25
☐ 25 – 34
☐ 35 – 44
☐ 45 – 54
☐ 55+

Which of the following have you taught during the most recent academic year?

Please use the following definitions:

- *Face-to-face Course: A course where all meetings are face-to-face, may use a learning management system (LMS) or web pages to post the syllabus and assignments.*
- *Blended/Hybrid Course: A course where sufficient content is delivered online to create a reduction in the number of face-to-face class meetings.*
- *Online Course: A course in which all, or virtually all, the content is delivered online. Typically have no face-to-face class meetings.*

Please check all that apply.

	<i>Face-to-face course</i>	<i>Blended/Hybrid course</i>	<i>Online Course</i>
Graduate level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Undergraduate level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How often have you done each of the following?

Used digital materials such as simulations and videos in course presentations.

- ☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Assigned material available only in eTextbook format.

- ☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Assigned books for which eTextbooks and traditional formats are both available.

- ☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Published digital scholarship (beyond publishing an online version of a traditional scholarly paper).

- ☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Used social media to interact with students.

- ☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Used social media to interact with colleagues.

- ☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

What is your opinion about the nature of support that you have received from your institution? My institution...

Respects teaching with technology (in person or online) in tenure and promotion decisions.

- ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ Don't Know

Has a fair system of rewarding contributions made to digital pedagogy.

- ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ Don't Know

Has strong policies to protect intellectual property rights for digital work.

- ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ Don't Know

Provides support and flexibility in understanding and choosing intellectual property policies

- ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ Don't Know

Who has a role in selecting educational resources for use in the courses you teach?

(Select all that apply.)

- ☐ Me
☐ Another faculty member
☐ A faculty committee
☐ Program or division
☐ Instructional design group
☐ Administration
☐ Other

Who has the PRIMARY role in selecting educational resources for use in the courses you teach? (Select only one response.)

- ☐ Me
☐ Another faculty member
☐ A faculty committee
☐ Program or division
☐ Instructional design group
☐ Administration

☐ Other

When selecting resources for your teaching, which of the following factors are most important to you? (CHOOSE THREE) Please drag the three most important factors to the box on the right (the order in which you drag the three factors is not important).

Three Most Important Factors (in any order)

- Cost
- Proven to improve student performance
- Easy to find
- Includes all the materials I need
- High-quality and factually correct
- Covers my subject area sufficiently
- Works with my institution's Learning Management System (LMS)
- Mapped to learning outcomes
- Current and up-to-date
- Easy to use
- Used by other faculty members
- Provided by my institution
- Ready to use
- Adaptable/editable
- Any other factor

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

Public Domain ☐ Unaware ☒ Somewhat Aware ☐ Aware ☐ Very Aware

Copyright ☒ Unaware ☐ Somewhat Aware ☐ Aware ☐ Very Aware

Creative Commons ☒ Unaware ☐ Somewhat Aware ☐ Aware ☐ Very Aware

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

Please provide some examples of Open Educational Resources that you are aware of.

If you were to describe the concept of open resources for education to a colleague, which of the following would you include in your description?

Is available for free

☐ Not Included ☐ May or May Not Include ☐ Would Include

Has the ability to remix and repurpose

☐ Not Included ☐ May or May Not Include ☐ Would Include

Is provided with a Creative Commons license

☐ Not Included ☐ May or May Not Include ☐ Would Include

Is easy to combine with other course materials

☐ Not Included ☐ May or May Not Include ☐ Would Include

Is of high quality

☐ Not Included ☐ May or May Not Include ☐ Would Include

Is more up to date than textbooks

☐ Not Included ☐ May or May Not Include ☐ Would Include

Have you used open educational resources in either of the following ways? I have used OER as...

Primary course material (main class material used by teacher and students)

☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Supplementary course material (supporting material to enhance teaching or as further reference for students)

☐ Never / NA ☐ Rarely ☐ Occasionally ☐ Regularly

Ask if

I have used OER - Rarely Is Selected

Or

I have used OER - Occasionally Is Selected

Or

I have used OER - Regularly Is Selected

Have you used any of the following types of open educational resources?

	Yes	No
Videos	<input type="radio"/>	<input type="radio"/>
Audio podcasts	<input type="radio"/>	<input type="radio"/>
Images	<input type="radio"/>	<input type="radio"/>
Infographics	<input type="radio"/>	<input type="radio"/>
Interactive games or simulations	<input type="radio"/>	<input type="radio"/>
Video lectures/tutorials	<input type="radio"/>	<input type="radio"/>
Tests and quizzes	<input type="radio"/>	<input type="radio"/>
Open textbooks, chapters from textbooks	<input type="radio"/>	<input type="radio"/>
Homework exercises	<input type="radio"/>	<input type="radio"/>
Slides and class presentations	<input type="radio"/>	<input type="radio"/>
Whole course	<input type="radio"/>	<input type="radio"/>
Elements of an existing course e.g. a module/unit	<input type="radio"/>	<input type="radio"/>
Lesson Plans	<input type="radio"/>	<input type="radio"/>
Any other type	<input type="radio"/>	<input type="radio"/>

Ask if

I am very aware of OER and know how they can be used in the classroom Is Selected

Or

I am aware of OER and some of their use cases Is Selected

Or

I am somewhat aware of OER but I am not sure how they can be used Is Selected

How would you compare the quality of open resources to that of traditional resources on the following dimensions?

	Open Resources Superior	About the Same	Traditional Resources Superior	No Opinion/ Don't Know
Cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proven to improve student performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy to find	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Includes all the materials I need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High-quality and factually correct	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Covers my subject area sufficiently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works with my institution's Learning Management System [LMS]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mapped to learning outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current and up-to-date	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Materials are rated by faculty or editors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adaptable/editable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ask If

I have used OER as... Primary course material - Never / NA Is Selected

And

I have used OER as... Supplementary course material - Never / NA Is Selected

Do you think you will use Open Educational Resources in the next three years?

- ☐ I am not interested in using Open Educational Resources
- ☐ I might consider using Open Educational Resources
- ☐ I will consider using Open Educational Resources
- ☐ No opinion /Don't know

How would you rate the quality (factually correct, up-to-date, well-written, organized, effective) of Open Educational Resources and material from traditional publishers?

Traditional publishers

☐ Poor ☐ Average ☐ Good ☐ Excellent ☐ Don't Know

Open Educational Resources

☐ Poor ☐ Average ☐ Good ☐ Excellent ☐ Don't Know

Ask If

I am very aware of OER and know how they can be used in the classroom Is Selected

Or

I am aware of OER and some of their use cases Is Selected

Or

I am somewhat aware of OER but I am not sure how they can be used Is Selected

How would you rate the ease of searching for educational resources for your courses?

From traditional publishers

☐ Very Difficult ☐ Difficult ☐ Easy ☐ Very Easy

Open educational resources

☐ Very Difficult ☐ Difficult ☐ Easy ☐ Very Easy

Ask If

I am very aware of OER and know how they can be used in the classroom Is Selected

Or

I am aware of OER and some of their use cases Is Selected

Or

I am somewhat aware of OER but I am not sure how they can be used Is Selected

Or

I have heard of OER, but don't know much about them Is Selected

What are the three most important deterrents to the use of Open Educational Resources in your courses? Please drag the three most important deterrents to the box on the right (the order in which you drag the three deterrents is not important).

Three Most Important (in any order)

- _____ Too difficult to use
- _____ Too hard to find what I need
- _____ Not enough resources for my subject
- _____ Not high-quality
- _____ Not current, up-to-date
- _____ Not relevant to my local context
- _____ No comprehensive catalog of resources
- _____ Not knowing if I have permission to use or change
- _____ Lack of support from my institution
- _____ Too difficult to change or edit
- _____ Too difficult to integrate into technology I use
- _____ Not effective at improving student performance
- _____ Not used by other faculty I know

Do you believe the following statements about Open Educational Resources (OER) are true?

Use of OER leads to improvement in student performance.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

Use of OER leads to improvement in student satisfaction.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

The open aspect of OER creates different usage and adoption patterns than other online resources.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

Open educational models lead to more equitable access to education, serving a broader base of learners than traditional education.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

Use of OER is an effective method for improving retention for at-risk students.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

OER adoption at an institutional level leads to financial benefits for students and/or institutions.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

Use of OER leads to critical reflection by educators, with evidence of improvement in their practice.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree ☐ No Opinion

We welcome your comments. Please let us know your thoughts on any of the issues covered in this survey.

May we quote your response? Published comments will only include attribution of the discipline of the faculty member and if they are full- or part-time ("Full-time Natural Sciences Faculty", "Part-time Mathematics Faculty"). No personal identifiable information will be included.

☐ Yes
☐ No <preselected>

May we contact you with follow-up questions?

☐ Yes
☐ No <preselected>

Thank you.

This is the end of the survey - pressing the ">>" button below will record your responses.

Note: Do not press ">>" until you are sure you are finished - once your survey has been recorded you will no longer be able to edit your responses.

BABSON SURVEY RESEARCH GROUP

The Babson Survey Research Group conducts regional, national, and international research, including survey design, sampling methodology, data integrity, statistical analyses and reporting.



<http://www.onlinelearningsurvey.com/>

Open Educational Resources

- Growing the Curriculum: Open Education Resources in U.S. Higher Education

National and Regional Surveys of Online Education

- Grade Change: Tracking Online Education in the United States
- Changing Course: Ten Years of Tracking Online Education in the United States
- Going the Distance: Online Education in the United States, 2011
- Online Learning Trends in Private-Sector Colleges and Universities, 2011
- Class Differences: Online Education in the United States, 2010
- Learning on Demand: Online Education in the United States, 2009
- Staying the Course: Online Education in the United States, 2008
- Online Nation: Five Years of Growth in Online Learning
- Making the Grade: Online Education in the United States, 2006
- Making the Grade: Online Education in the United States, 2006 - Midwestern Edition
- Making the Grade: Online Education in the United States, 2006 - Southern Edition
- Growing by Degrees: Online Education in the United States, 2005
- Growing by Degrees: Online Education in the United States, 2005 - Southern Edition
- Entering the Mainstream: The Quality and Extent of Online Education in the United States, 2003 and 2004
- Sizing the Opportunity: The Quality and Extent of Online Education in the United States, 2002 and 2003

Higher Education Faculty and Technology

- Digital Faculty, Professors, Teaching and Technology, 2012
- Conflicted: Faculty and Online Education, 2012

Social Media Use in Education

- Social Media for Teaching and Learning 2013
- Blogs, Wikis, Podcasts and Facebook: How Today's Higher Education Faculty Use Social Media, 2012
- Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media

K-12 Online Learning Survey Reports

- Online Learning In Illinois High Schools: Has The Time Come?
- Class Connections: High School Reform and the Role of Online Learning
- K-12 Online Learning: A 2008 follow-up of the Survey of U.S. School District Administrators
- K-12 Online Learning: A Survey of U.S. School District Administrators

The A·P·L·U-Sloan National Commission on Online Learning

- Online Learning as a Strategic Asset, Volume II: The Paradox of Faculty Voices: Views and Experiences with Online Learning
- Online Learning as a Strategic Asset: A Survey of APLU Presidents and Chancellors
- Online Learning as a Strategic Asset: A Survey of NAFEO Presidents and Chancellors
- Online Learning as a Strategic Asset: A Survey of AIHEC Tribal College and University

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Responses from a representative national sample of higher education teaching faculty demonstrate that most faculty remain unaware of open educational resources (OER) and it is not yet a driving force in educational material adoption decisions.

Key findings:

Faculty are not very aware of open educational resources. Depending on the strictness of the awareness measure, between two-thirds and three-quarters of all faculty classify themselves as unaware on OER.

Faculty appreciate the concepts of OER. When presented with the concept of OER, most faculty say that they are willing to give it a try.

Awareness of OER is not a requirement for adoption of OER. More faculty are using OER than report that they were aware of the term OER. Resource adoption decisions are driven by a wide variety of factors, with the efficacy of the material being cited most often. These decisions are often made without any awareness of the specific licensing of the material, or its OER status.

Faculty judge the quality of OER to be roughly equivalent to that of traditional educational resources. Most faculty report that they are not sufficiently aware of OER to judge its quality. Among those who do offer an opinion, three-quarters rank OER as the same as or better than traditional resources.

The most significant barrier to wider adoption of OER remains a faculty perception of the time and effort required to find and evaluate it. The top three cited barriers among faculty members for OER adoption all concern the discovery and evaluation of OER materials.

Faculty are the key decision makers for OER adoption. Faculty are almost always involved in an adoption decision and — except for rare instances — have the primary role. The only exceptions are in a minority of two-year and for-profit institutions, where the administration takes the lead.



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