

# UC Berkeley

## Research and Occasional Papers Series

### Title

AFFORDABLE AND OPEN TEXTBOOKS: An Exploratory Study of Faculty Attitudes

### Permalink

<https://escholarship.org/uc/item/1t8244nb>

### Authors

Harley, Diane  
Lawrence, Shannon  
Acord, Sophia Krzys  
et al.

### Publication Date

2010

Research & Occasional Paper Series: CSHE.1.10

**CSHE** | Center for Studies in Higher Education  
UNIVERSITY OF CALIFORNIA, BERKELEY  
<http://cshe.berkeley.edu>

## **AFFORDABLE AND OPEN TEXTBOOKS: An Exploratory Study of Faculty Attitudes**

January 2010

**Principal Investigator:  
Diane Harley, Ph.D.**

**Research Associates:  
Shannon Lawrence, M.A., Sophia Krzys Acord, Ph.D., Jason Dixson, M.P.P.**

**Project website: <http://cshe.berkeley.edu/research/opentextbooks/>**

*Copyright 2005–2010, Center for Studies in Higher Education, all rights reserved.*

---

### **ABSTRACT**

The textbook industry is in significant flux that is fueled by evolving technologies, increased availability of online open content and curricula, active used textbook markets, and, most recently, a rash of textbook rental start-ups, just to name a few of the factors at play. At the same time, Open Educational Resources (OERs)—learning materials distributed openly for either no or minimal cost—may have become commonplace enough that a credible, viable infrastructure for open textbooks, one that mainstream faculty would accept, could be imagined.

Our research, which employed an online survey and focus groups, explored faculty perceptions about affordability and open textbooks. Our results indicate that faculty want a diversity of choices when they choose a textbook. They are independent thinkers, exceptionally busy, suffer from extreme information overload, are generally dedicated to ensuring their students' success, and do not take well to "one size fits all" solutions. Our data indicated that any discussion about textbook affordability solutions must also take into account that most faculty are active and independent decision makers when it comes to choosing a textbook or other curricular materials for their courses; the top-down high-school model of textbook adoption is anathema to many professors and instructors. Complicating the picture are the natural, heterogeneous needs among the institutions, disciplines, and courses encompassed by higher education; the type of institution and the level and content of the course will ultimately determine which curricular forms offer the best solutions. Faculty made clear that their students represent a plethora of learning backgrounds and goals, and also desire flexibility and choice in textbook options. What is notable and cannot be ignored is that purely electronic solutions will not be universally embraced in the near term. Reasons for resistance included students' need for the safety net of

---

a printed textbook and the positive pedagogical practice of engaging with the text by “writing in the margins” (which is not a practical reality in current electronic platforms).

Regarding the demand for open textbooks, there simply are not enough currently available in enough disciplines to satisfy the multitude of faculty and student needs in lower and upper division courses; a much wider array of high-quality, easy-to-use, and reliable open textbooks will have to be produced for more widespread faculty adoption to be realized. Even then, open textbooks will likely be only one of many players in the curricular materials market.

*This work, directed by Diane Harley, was conducted under the aegis of the Higher Education in the Digital Age Project at the Center for Studies in Higher Education: <http://cshe.berkeley.edu/people/dharley>*

---

## TABLE OF CONTENTS

<b>Abstract.....</b>	<b>1</b>
<b>Introduction .....</b>	<b>3</b>
<b>Context for Research.....</b>	<b>3</b>
<b>Summary of Results .....</b>	<b>4</b>
<b>Methods .....</b>	<b>5</b>
<b>Results .....</b>	<b>7</b>
Focus Group Results.....	7
Survey Results .....	18
<b>Appendix: Survey Instrument .....</b>	<b>25</b>

### Acknowledgements

We are grateful to the many faculty who took time out of their busy schedules to participate in the study, the administrative staff at each of the focus group sites for facilitating our visits, and Nicole Allen at Student PIRGs for her advice. This report benefited tremendously from the lead author’s access to the ongoing deliberations of the UC Berkeley [Joint Task Force on Textbook and Reader Affordability](#) (aka the Textbook Affordability Task Force). We are especially grateful to Barbara Gross Davis and Jean Barker, as well as other members of the task force, for providing us full access to their deliberations and resources. Finally, we want to thank Emily Hilligoss for her editorial assistance.

## INTRODUCTION

The Student Public Interest Research Groups (Student PIRGs) have been working on the problem of textbook affordability for college students since 2003. At the same time, Open Educational Resources (OERs)—learning materials distributed openly for either no or minimal cost—may have become commonplace enough that a credible, viable infrastructure for open textbooks, one that mainstream faculty would accept, could be imaginable.<sup>1</sup>

In 2007, the Student PIRGs launched a two-year campaign ([MakeTextbooksAffordable.org/statement](http://www.makertextbooksaffordable.org/statement)) to drive mainstream faculty's acceptance of open textbooks and other affordable alternatives to traditional textbooks. The goal of the campaign was to instigate a shift in the market toward lower-cost materials like open textbooks. The strategy was to elevate the visibility of open textbooks as a solution to create more faculty (and public) demand for those curricular materials. Specifically, the campaign encouraged faculty to sign a public statement of support, as stated on its website:

Faculty members share students' concerns about the high cost of college textbooks, but they often find it difficult to find appropriate course materials at an affordable price. Free, online open textbooks represent a promising way to expand the existing textbook market to include more low-cost, comparable options. By signing this statement, faculty members state their intent to include open textbooks in their search for the most appropriate course materials, and they declare their preference to adopt an open textbook in place of an expensive, commercial textbook, if the open textbook is the best option.<sup>2</sup>

UC Berkeley's Center for Studies in Higher Education was awarded a grant from the William and Flora Hewlett Foundation, via the Student PIRGs, to conduct an independent, objective, and exploratory analysis of the campaign. In 2009, we employed a short survey and conducted a small number of focus groups to determine whether or not faculty had been influenced by the Student PIRGs' campaign. Our research questions included: Did the Student PIRGs' campaign have an effect on faculty behavior and/or attitudes regarding open textbooks and other affordable alternatives? If so, how? And if not, why not? We also more generally addressed faculty perceptions about affordability and open textbooks. For the purposes of this study, "open textbooks" were defined as: *affordable (in some cases, free) online textbooks. The content of open textbooks is licensed to allow anyone to use, download, customize, or print without expressed permission from the author.*

We make no claims as to the scientific validity of the results reported here. The samples were not chosen randomly, the Ns were relatively small, and the individuals we sampled were surely not fully representative of the entire faculty population of interest to the Student PIRGs and other stakeholders involved in achieving textbook affordability. The purposes of the study were purely exploratory and were intended to provide the Student PIRGs with a snapshot of the effectiveness of their campaign, and also to provide them and others a bead on some general aspects of faculty attitudes about textbook affordability and open textbooks.

<sup>1</sup> The Student PIRGs are particularly interested in open textbooks that look and act like traditional hard-copy textbooks—not innovative replacements for the printed book.

<sup>2</sup> The full text of the statement is available at the Student PIRGs website: <http://www.makertextbooksaffordable.org/statement.asp?id2=37614>

## CONTEXT FOR THE RESEARCH

By way of introduction to our results, it is important to note the national context of our research. Quite simply, the textbook industry is in significant flux.<sup>3</sup> In an era of escalating across-the-board-college costs, evolving e-reader technology like the Kindle, new forms of open content and curricula, electronic versions of textbooks, entrenched used book markets, and burgeoning textbook rental start-ups are just some of the elements that will impinge on predictions about the future of textbooks in higher education. What seems clear is that there will likely be multiple paths to solving the problem of textbook affordability, which may or may not include all of these models, and others not yet envisioned. One constant will be the desire of faculty to have the ability to easily find, and choose from, an array of high-quality materials that fit with their and their students' pedagogical needs in an affordable and discipline-appropriate manner.

Regarding the context of Student PIRGs' campaign itself, it must be noted that this organization has been at the forefront of raising awareness about textbook affordability for much of the decade. And although our research did not show that the "statement of intent campaign" specifically drove faculty toward more affordable options, the national publicity generated by the campaign in news outlets—like *Time* magazine, *USA Today*, the *Washington Post*, and the *LA Times*, as well as its citation in government reports, such as the Department of Education's 2007 [ACSFA](#) textbooks report<sup>4</sup>—very likely increased awareness of the problem of textbook affordability and open textbook alternatives both within and beyond the academic community. A significantly more far-reaching research investigation perhaps could determine more precisely just how Student PIRGs' efforts worked in concert with parallel developments to affect the general *zeitgeist* of the national textbook affordability and open textbook conversation.

## SUMMARY OF RESULTS

We present below a brief summary of our findings based on our focus groups and survey. The full description of the survey and focus group results follows this section.

Faculty are independent thinkers, exceptionally busy, suffer from extreme information overload, are generally dedicated to ensuring their students' success, and do not take well to "one size fits all" solutions. Any discussion about textbook affordability solutions must take into account that most faculty are active and independent decision makers when it comes to choosing a textbook or other curricular materials for their courses; the top-down high-school model of textbook adoption is anathema to many professors and instructors. Complicating the picture are the natural, heterogeneous needs among the institutions, disciplines, and courses encompassed by higher education. Faculty made clear that their students represent a plethora of learning backgrounds and goals, and that they desire flexibility and choice in textbook options.

A number of culprits regarding the problem of high costs were identified by our informants. These include the used book market, rapacious markups by college bookstores, the bundling of unnecessary supplements, and the creation of unnecessary new editions. It is also clear that any discussion about textbook affordability solutions must ask the questions: Which students are we concerned about? Are they taking advanced courses or introductory ones? Are they remedial, technical, or in the humanities? Is the course in their major or just a requirement to get

<sup>3</sup> See, for example, recent stories from *Inside Higher Education*: <http://www.insidehighered.com/news/2009/08/11/books>, <http://www.insidehighered.com/news/2009/09/24/textbooks>, <http://www.insidehighered.com/views/2009/10/06/hess>, and *The Chronicle of Higher Education*, <http://chronicle.com/blogPost/iPhone-Textbook-Apps-Just-Keep/7674/>

<sup>4</sup> Advisory Committee on Student Financial Assistance, *Turn The Page: Making College Textbooks More Affordable*, May 2007. United States Department of Education. <http://www.ed.gov/about/bdscomm/list/acsfa/edlite-txtbkstudy.html>

out of the way? Are they studying at a community college, where textbook bills are a large proportion of overall education costs, a large state four-year institution, or an exclusive private college with high overall tuition relative to annual textbook costs?

Given the powerful influences generated by this granularity in the student population, a single solution to the textbook affordability problem (e.g., “open textbooks”) is probably not practical or desirable. Indeed, a predetermined solution of “open textbooks” or “open educational resources” and the jargon surrounding these concepts may work against the OER movement and actually dissuade some faculty who are otherwise concerned about the economic situation of their students. Not surprisingly, faculty want a diversity of choices, and there simply are not currently enough open textbooks to satisfy the multitude of faculty and student needs; a much wider array of high-quality, easy-to-use, and reliable open textbooks will have to be produced for more widespread faculty adoption to be realized. Moreover, in addition to the heterogeneous needs of faculty regarding textbook options, it is clear that their students—who represent a plethora of demographics, learning backgrounds, and goals—desire flexibility and choice. What is notable and cannot be ignored is that many faculty suggested that purely electronic solutions will not be universally embraced. Reasons for resistance included students’ need for the safety net of a printed textbook<sup>5</sup> and the positive pedagogical practice of engaging with the text by “writing in the margins” (which simply is not a practical reality in current electronic platforms).<sup>6</sup>

We strongly recommend that a diversity of faculty input (and student voices), which represent valid ideas about the best solutions given their experiences, be included in any conversation about textbook affordability options. Such an approach is essential to moving toward an acceptable environment for affordable and effective teaching and learning in the different sectors of higher education.

## METHODS

The specific aspects of (1) the focus group and (2) the survey methodologies are described separately below. Both of the protocols, developed in consultation with the Student PIRGs, were informed by the following general set of questions:

- Did the Open Textbooks Statement of Intent influence your thinking on open textbooks? Did you sign? Why or why not?
- Do you or don't you use open textbooks? Why or why not?
- Would you support a change in the published medium of a textbook (e.g., paper vs. electronic) if the only change to your textbook was the manner in which students could access it (online, downloadable, printable, affordable, etc.)?
- What features in an open textbook would be necessary for you to consider it a viable choice for your class(es)? What features in current textbooks need to be changed or improved?
- Are you aware of discussions about textbook affordability (among faculty and/or administrators) in your department or college? If so, what is the nature of those discussions? What actions, if any, have been taken by your department or elsewhere in the administration? Who makes decisions about textbook adoption?

<sup>5</sup> See, for example, the results of a Student PIRGs report, based on a survey of students, regarding desirable criteria in digital textbooks: affordable, printable, and accessible. The Student PIRGs. 2008 (August). *Course Correction: How Digital Textbooks are Off Track and How to Set Them Straight*.  
<http://www.maketextbooksaffordable.org/newsroom.asp?id2=44596>

<sup>6</sup> Hyung Lee, 2009 (September 28). “Kindles yet to woo University users.” *The Daily Princetonian*.  
<http://www.dailyprincetonian.com/2009/09/28/23918/> Also republished at [futureofthebook.com](http://futureofthebook.com) by Bob Stein as “The Kindle Gets Poor Grades at Princeton.”  
[http://www.futureofthebook.org/blog/archives/2009/09/the\\_kindle\\_gets\\_poor\\_grades\\_at.html](http://www.futureofthebook.org/blog/archives/2009/09/the_kindle_gets_poor_grades_at.html)

All faculty in our sample were from California community, state, and private colleges, and all samples were derived from the Student PIRGs' campaign lists. As far as we can discern, the lists included faculty who had been previously contacted by the Student PIRGs (according to the group's records). The campaign lists were comprised of and specifically limited to faculty, adjuncts, and instructors teaching in the STEM (science, technology, engineering, and math) fields, as well as business and economics. The diversity of "department" types and monikers, especially at the community colleges, makes it difficult to compare disciplines across higher education sectors. We did not sample faculty in the social sciences (other than economics) and humanities, as there were certainly no quality open textbook options available in those fields based on our scan of "open" textbook or other curricular material sites; and, it was deemed likely that faculty in these fields are more likely to use custom materials, such as course packets and primary literature and sources, rather than canned "textbooks."<sup>7</sup>

## **FOCUS GROUPS**

A total of 468 faculty at five institutions were invited directly to participate via email during April 2009. These five institutions were selected in consultation with the Student PIRGs based on: (1) the number of faculty contacts in the Student PIRGs' database, (2) institution type, and (3) representativeness of department types, including: business, biology, chemistry, economics, engineering, and math. Sites were also chosen based on convenience. Additionally, department chairs and deans in the identified departments at each institution were contacted by email with a request for guidance in soliciting department faculty.<sup>8</sup>

Focus groups were conducted in April and May 2009 with a total of 22 participants from three institution types: community college (N=10), California State University (CSU) (N=6), and University of California (UC) (N=6). Focus group participants included faculty in business, biology, chemical engineering, chemistry, computer science, English, geography, management and informational systems, mathematics, and physics.

Focus groups were held on the campus of each participating institution and lasted for approximately two hours. Lunch was provided. We guided discussions around a semi-structured set of questions (see above). Focus groups were digitally recorded and transcribed. We also took into account various emails and phone conversations with individuals who could not attend but had strong opinions, as well as the opinions of others with whom we had spoken about these topics. The focus group results below also include the written thoughts offered by survey takers.

## **SURVEY**

### **Instrument**

We developed a set of questions around the following broad topics: (1) attitudes about the campaign, (2) attitudes about textbook affordability, and (3) attitudes about open textbooks and open educational resources in general. The survey protocol can be found in the appendix.

<sup>7</sup> Harley, Diane. "[Why Understanding the Use and Users of Open Education Matters.](#)" In [Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge](#), edited by Toru Iiyoshi and M.S. Vijay Kumar. Cambridge, MA: MIT Press, 2008.

<sup>8</sup> Because our sampling method expanded beyond the contact database provided by the Student PIRGs, not all focus group participants had been previously contacted by that organization. Additionally, some focus group participants were from disciplines in the humanities and social sciences. The majority (N=15, 68%) of focus group participants were in the Student PIRGs database.

A pilot survey, developed in consultation with the Student PIRGs, was tested with a small group of faculty in early 2009. The final version of the survey had a total of 15 questions, including yes/no, multiple-choice, ranking, and open-ended questions that utilized skip logic. All questions had write-in responses, which we deemed an important opportunity for the expression of opinions we might not have anticipated in the protocol questions. The survey was launched using online survey software via Zoomerang.com in May 2009 for two weeks. All research was approved by the University of California Office for the Protection of Human Subjects.

## Sample

As suggested by the Student PIRGs, the original sample for the survey included 5397 possible participants. A total of 1596 invalid email addresses were identified, reducing the total number of invited faculty to 3801. To create an incentive for participation, faculty were also invited to enter their name into a separate prize drawing. Two winners were chosen after the survey was closed. At the request of the Student PIRGs, only one follow-up reminder email was sent to nonresponders after the initial survey invitation. We did not conduct a nonresponse survey. Of the 3801 invited participants, a total of 224 faculty responded to the survey, resulting in a 5.9% response rate.

The majority of faculty respondents were from community colleges and California State Universities. While respondents represented various disciplines, mathematics instructors, as well as faculty in business and biology, were over-sampled relative to the other disciplines. Response rates by discipline did not appear to be highly variable. More than three-quarters of the survey respondents reported that they had publication experience as authors (which was defined loosely by many and included posting lecture notes). The majority had not signed the Student PIRGs affordable textbooks statement of intent prior to completing the survey. Due to the low number of responses from private college faculty, these responses will be considered an exception throughout and will not be discussed in our analyses.

## RESULTS

### FOCUS GROUP RESULTS

#### Perceptions of print textbooks and the publishing industry

##### Textbook affordability

Our sense was that many institutions and departments have the textbook affordability issue on their radars. In fact, participants (who had self-selected to participate in the study) were, in general, keenly aware of textbook affordability issues. As described in the introduction, we did not (and perhaps could never) measure the Student PIRGs campaign's direct effect on this perception; however, we suspect that it, as well as other factors, had an influence on faculty awareness of these issues (even subconsciously).

Usually it [affordability] doesn't [rank up there as a criteria for selecting a textbook], because I really want to try to choose the textbook that's going to be best for the class. But now the prices are just getting so outrageous that students are going to have to spend \$100 for every book. When I was in school, I think I spent maybe \$200 for the whole semester, or whole quarter, and that was on five or six textbooks. Now that's like two books and you're done. It's outrageous and it's unconscionable.

The vast majority of the faculty with whom we spoke were sympathetic to concerns about exorbitant textbook costs, and several noted that they were already making efforts using available means to address this issue. These "stopgap" solutions encompass publisher

negotiations (including negotiations for custom textbooks), textbook loans or temporary library reserve programs, recommending previous editions or cross-listing suggested readings with pages from other textbooks, and encouraging students to take advantage of the used textbook market. One group of faculty worked with the publisher to offer a “split” edition across multiple semesters, but the cost proved to be more expensive for students within the major who took the entire series. Both CSU and community college faculty briefly mentioned online publisher alternatives, such as popular textbooks available online for a reduced fee, but these were quickly dismissed by others due to the still-high costs (e.g., \$40-\$50) and limited access (e.g., expiring after a semester to 1-2 years). Still other faculty had replaced textbooks in their courses with low-cost photocopied “readers,” placed significant amounts of self-generated educational materials online for student access, or tried “to make sure that there are books on reserve, as many as we can for students who have concerns with cost.”

The faculty we interviewed indicated that none of these alternative means were satisfactorily solving the problem of what they perceived as a dysfunctional system, but temporary solutions were “better than doing nothing.”

I’ve had a huge amount of experience discussing with publishers about getting paperback editions made, cutting prices for the students...and a certain amount of preliminary experience playing them off against each other...We certainly have these same discussions related to, “Okay, are we going to have textbook? Are we going to make it open, or will students just go on the Web and get information from a whole variety of sources?” It’s a whole spectrum of opinions, but we seem to always come around to recommending the textbook...There are options where the publishers will do a book that’s shorter, that just covers the subjects, and so those have been available.

In some fields, an introductory textbook includes “fundamental principles” and can be an important part of a personal library for majors. In such cases, it was noted that textbook costs can be spread over many classes. Students in advanced courses may also need a textbook to understand complex principles that cannot be taught during class time. Students taking introductory courses outside of their major may not need to keep (or have any interest in keeping) the book, which many faculty noted as problematic. We also heard that some international students, including those who are bi- or multilingual, can purchase textbooks abroad (e.g., Asia) at considerably cheaper rates.

At the intro level, I get the feeling that very few students want to keep the books, and actually, they get hit by the bookstore twice. First, when they buy the book, it’s very expensive over here. In my classes...I tell them openly, “Go buy them on Amazon, not on campus.” Then they finish the semester, they don’t care about physics so they want to get rid of the textbook; they want their money back and they go to the bookstore, and the bookstore buys them back at a very, very low price. So they get hit a second time.

Some faculty also pointed out particular problem areas, such as exceptionally high price markups at university bookstores,<sup>9</sup> particularly for book titles in large lecture courses, which tend to subsidize the high costs of textbooks in smaller courses. Large markups in the professional fields are also seen as commonplace).

I had reps from the student bookstore come to my office and tell me that they deliberately marked up engineering textbooks 40% because they knew that students would pay it, and they could afford to pay it, that that was subsidizing the other textbooks, and they made no bones about it.

<sup>9</sup> See, for example, a discussion of the used textbook market in: Why Are Textbooks So Expensive?, *Academic Observer*, January, 2005, Vol 18, No. 1. <http://www.psychologicalscience.org/observer/getArticle.cfm?id=1712>

UC faculty noted that textbook cost was a minor concern compared to other higher educational expenses and distributions of fees.

My impression is, looking at the expenses of attending the university, that the textbooks are not so much a problem as other things...

The question I'd bring to CalPIRG if they were sitting at this table is: Maybe you should calculate what fraction of tuition goes to instruction?

Rental programs were not discussed widely in the focus groups, although there has been much recent public press about universities exploring this as a possible alternative. One mention of textbook rental referred to a student council lobbying effort. Several faculty in our focus groups did note that they personally loaned books to students or made personal copies available on reserve through the campus library.

### **Supplementary materials**

Many faculty valued supplementary materials and flexibility in picking and choosing such add-on options. Graphics/illustrations/animations, detailed exercises, and particularly additional problem sets and solutions (especially graded homework, which was an essential feature for departments without TA support) are useful adjuncts to standard textbooks. A few faculty complained that bundled textbooks (with DVDs or CDs) made the books more expensive, and were often not used by the students or the faculty.

There are other things that you have to consider about the hardbound textbooks, at least for the introductory classes; you have a lot of stuff that faculty use in classes, like transparencies, simulations, clickers. So you have this huge side industry that comes with a textbook, and if you have an online book, you're not going to have that. One thing that's become crucial for us is having homework that's graded online. We just can't afford to have TAs.

In physics, especially at the upper division level and higher, the final answers of equations become so complicated and abstract that you don't see anything until you get the final answers...You want to see what this thing looks like and that's essential for students to develop any kind of intuition. That you can do beautifully with textbooks online; you can't do that with hardbound textbooks.

For me, the most important feature that I see lacking in a printed book is animation. And if you have to visualize, let's say, body anatomy in three dimensions and how it's going to be sliced in a particular way and what will it look like, animation is really, really important. It really helps, and that's something that's lacking in a physical textbook.

Several of the instructors in our focus groups explained how they create their own online supplements, either by pointing students to existing online resources (including but not exclusive to OERs) or, in some cases, making their own. For these faculty, the idea of being able to customize online materials was perceived as attractive. Some faculty expressed concern that essential supplementary materials might not be included with an open or free textbook. Others, however, noted that online supplements could be made open source, which would enable more frequent updates, particularly by users (with editorial oversight).

I have developed my own website—it's very extensive...I have my own lecture notes, I have assignments, I have exercises, I have case studies, I have humor, comics, I have videos, I have YouTube videos...So when I want to teach, I cherry-pick...Then that becomes my textbook.

There are simulations, animations, graphics that don't necessarily come with our particular textbook, but they're out there on the Web.

All information that we communicate comes in one of five forms—data, numbers—textbooks can handle that—text, words—textbooks can handle that—image, pictures—textbooks can handle it. Then we get to richer media, which is audio and video, and they're very important...A video would be like a field trip...And these traditional textbooks are totally useless when it comes to that, except when they have these little gimmicks with the DVDs or CDs. And sometimes they don't work, sometimes they come too outmoded, are not current, and so forth. So I think the advantage of this online environment is that you can offer those and update them as much as you want.

One individual noted that some high-tech options are not always better and may actually confuse and overwhelm students. For instance, drawing a figure or graphic by hand on a whiteboard can enable, pedagogically, a better type of learning than seeing an animation. In this particular case (which had been “tested” by the faculty member), the hand drawing simplified the concept for students and better met the needs of both faculty and students.

Prose is relatively easy to grasp on a screen, but I think the complicated interrelation of concepts in a picture requires you to think about it for awhile and really dwell on it. I don't think young people are accustomed to dwelling for a long time on something on the screen. They're interested in things that are much more kinetic.

### **New editions**

The faculty in our focus groups had strong opinions about new editions. Many lamented what they perceived as the often-unnecessary publication of new editions, which was problematic for both instructors and students. This was especially seen as a nuisance in the case of textbooks that covered unchanging fundamental principles in a discipline.

There are new editions coming out all the time; there's no reason for it to happen. It's solely marketing... It's just like fins on the Cadillac in the '50s. And the students hate it because they can't get used copies, and the faculty hate it because we've all designed teaching these huge courses with a particular textbook in mind. In a given section, we assign problems 16, 19, and 2. Then, in a new edition, they get shuffled. So everybody hates it when it changes.

Even though neuroscience is a rapidly changing field and there is oodles of new stuff every month, the basic stuff doesn't change that much. And, so, really, what a good solid introductory textbook needs to have in it doesn't really have to be updated a lot.

This changing of the edition thing is ridiculous...Most of the time, when they make another edition, it's: “Why are the same typos that were in the first seven editions in the eighth edition? They couldn't fix it the first six times, seven times?”

It was noted, however, that emerging or fast-moving fields may require a medium that can keep up with new research; updated information and electronic media can be an effective solution to that problem.

I want to emphasize the difference between the hard sciences and the social sciences, especially business. Twenty years ago there was no WWW, no ebusiness, no websites...5 years ago there was no YouTube, no Wikipedia. It is so rapid that a book from 10 years ago is practically useless. They have to be constantly updated. We can't say we found the magic quantum mechanics, it's perfect, let's use it, freeze it, and keep it for posterity. That doesn't work in my field.

Particularly in introductory courses, most faculty prefer to use textbooks to teach students “the basics” and supplement these with new information only as they see fit. Faculty also pointed out that new editions may not be written by the original author, but instead by the publisher's staff. Some annoyance was also expressed about the fact that, once a new edition was published, previous editions disappeared from the used textbook marketplace. Keeping previous editions in circulation somehow, so that students are not forced into buying newer and more expensive

editions, seems to be desirable. Some faculty also mentioned that they routinely access free online content from previous editions that is made available by publishers.

### **Publishers**

While many faculty had complaints about publishers—ranging from hard (or constant) sales pitches to a lack of editorial oversight—the publishing industry was not universally vilified. Some of the faculty in our focus groups noted that publishers provide a real service (editorial, production, illustrations/artwork, etc.) and that those relevant support personnel have to be remunerated.

Having been a paid author on ancillaries for the textbook, I understand the value added beyond just the scholarship...One of the things that has really kept me tied to the book is the multitude of graphics and maps, which often have to be custom-made to make specific points...

But there's a dumbing down of textbooks, and I really resent that. I have had these sales reps come to my office to push the books, and I take one of their books, let's say, \$150, and I open it, and there's a picture...that takes a quarter of the page, of a secretary on the phone, a color picture of a secretary on the phone. What value does that add? Students are paying for that, and there are 60, 70 pictures like that, like two managers walking on the street. And this is a dumbing down. Cut out those pictures and reduce the price by 30%. The quality of the text and the narrative are so weak that they try to entice you with all this fluff.

Some mentioned that they would appreciate assistance with finding new textbooks and negotiating with publishers, and discussions often returned to the notion of power in numbers, regardless of institution type. Faculty perceived publishers as more responsive to negotiating good deals with instructors of large, introductory classes, especially those at large or multi-campus institutions.

What I actually need, what will be most useful—and I bet it's true in other big departments—is a negotiator or something. Honest to God, this CalPIRG, they ought to send over some students to negotiate prices down or something, because I pushed them [the publishers] but I've never pushed them hard enough, because I always got everything I asked for. We have huge clout and we need to use it more effectively.

If you really push the publishers, especially when they're dealing with large classes and you tell them, "Unless you give me this and that, I'm going to switch to another textbook," they will...

Some faculty suggested that more could be done at higher levels within the university/college structure to leverage bargaining power with publishers. Some coordinated effort could also give faculty from smaller schools or faculty with smaller class sizes the opportunity to band together and garner negotiating power for lower-cost custom textbooks. The fly in the ointment, of course, is that, just as with used books, the campus bookstores will probably raise the markup to offset the lower publisher price. Additionally, as discussed below, faculty may well resist fiats about what texts they have to use.

### **Choosing a textbook**

Most faculty we spoke with select their own textbooks; this autonomy is a *sine qua non* of college-level teaching in many departments.

We pretty much hold sacrosanct the faculty's right to choose the book they want...but that can make it difficult for the availability of these textbooks and standardization of curriculum, and so I don't see that that's the right way to do it.

Faculty indicated that they were careful to consider cost when choosing textbooks, but that issues around quality of content, including reliability and accuracy of answers, often do (and should) trump price.

Affordability is not the first thing that I consider...What I'm looking for is readability and correctness. It has to be correct...I'm very reluctant to go to an open textbook site...It would be more cobbled together. Who edits this? I don't have time to do that [go in and make sure it is correct], whereas I know that Pearson is doing that, so I trust them. And, to me, that might be worth the added expense...to my students too.

It's extremely important that the answer in the back of the book be correct...And this is non-trivial; it is highly non-trivial. And the one rationale for the cost of the expensive books is that they are reliable and you can trust what's in the back.

There is something to be said for a book being correct and understandable and having clear notation...It's particularly true in mathematics.

It needs to be peer reviewed carefully and we have to make sure that we have the right answers, and we need good editing—and that costs a lot of money.

In larger or sequential courses where multiple faculty are involved, it is not uncommon for a small number of faculty to informally or formally reach a consensus regarding a specific textbook or series of books. One example was proffered about a mathematics department, in which a department committee selected the required introductory textbooks and faculty had no leeway in deviating from the chosen text.

To try to tell professors how to teach is much harder than getting them to agree “Okay, we'll use the same textbook in the fall and the spring, even though I teach this differently than the other person.”

Some faculty can face quandaries. They want flexibility and control over content, the ability to customize textbooks, to pick and choose supplementary materials, and to incorporate their own materials at will. Some expressed frustration, particularly with publishers, that that flexibility was seldom provided.

When you use the word “textbook,” I cringe because it means someone's putting a straightjacket on me and I have to sit like this; I can't move.

We should be the packagers. They should give us a lot of materials. I don't like it when they pre-package it for us.

But even when they had access to such amendments, faculty lamented that limited personal time and resources often prevented them from fully taking advantage of these options.

What typically happens is you look through the textbook and glance at every chapter, and it looks very good to you. But then you actually use it in practice and the transparencies are not available and the grading online that they promised to you is not available yet—you know, “it's coming” and they usually tell you that—and the problems at the end of the chapter are not exactly what you expected. And these are things you only find out when you've used the book for a semester or so.

### **Perceptions of “open textbooks”**

Faculty expressed concerns about open textbooks as an affordability solution, citing, in particular, issues around remuneration for authors, protection of intellectual property, quality of the content, and overall accessibility. Some said that they wanted the ability to make their own

choices (or have some say) about possible solutions rather than have those solutions dictated to them, including those that put blame exclusively in the publishers' laps. Some participants mentioned that open-textbook solutions in general did not consider the value that publishers bring to the table, and that the educational professionals involved in textbook writing, illustration, and production need to be paid for their work. Issues around intellectual property were also a concern.

I have a real problem with open textbooks because there is a community of people—editors and illustrators, in particular—who are professionals, who are dedicated to education, who work very hard to produce visual things, and how do they get paid? Or rather, how might they get exploited if there's not an opportunity for them to earn an honest living?... And a great editor is a very, very valuable thing... They deserve a living. And so I worry about open sourcing books, particularly in the sciences and engineering, where illustration can be critical to understanding, and not having a mechanism to pay the people who do it.

Some people write textbooks for money and some people write textbooks because of their pride of intellectual ownership. So, if you write an online textbook, how are you going to protect that person from having others take bits and pieces of your book, putting them in their own notes, and saying, "This is mine?"

If you're thinking about making access to a free textbook where you've quoted someone else's work that's gone through multiple layers of review, and put it on your website, I think, "That's not fair."

I think of these open textbooks more like open shells. That is, someone is giving me a shell and saying, "Take whatever you want and do whatever you want with it to suit your purposes." And I don't think I would feel comfortable if someone took something in my name and then added, changed, deleted some stuff, and still my name was on it. I'm not responsible for that.

A common understanding of open textbooks did not emerge from our conversations. Some faculty were concerned that "open/free/affordable" and "high-quality" were oxymoronic. A fair number of concerns were expressed about intellectual property protection, loss of compensation to the author, and low production values. Faculty were also wary that open textbooks may reflect the idiosyncrasies (or biases) of their authors, and may not always provide a more objective or comprehensive portrayal of the field. Discussions around open textbooks sometimes morphed into broader discussions about available online resources or online courses. The landscape is complex because many faculty replace textbooks with a pastiche of self-generated and other resources, rather than a so-called "open textbook."

If I want to write an open-source textbook, I just write it and put it on a website, and there's no standard for editing.

It seems to me the central question would be: Is the review process [for open textbooks] as robust [as published textbooks], and can it be trusted?

Many faculty wanted more (or easier to find) information on the issue of open textbooks and some felt that there was not yet a "critical mass" of viable and trustworthy open textbooks in many subjects. Content and quality were foremost among the necessary inducements to switch to open textbooks, followed closely by good supplementary materials and built-in flexibility. Faculty might be amenable to using open textbooks, but noted that there were no high-quality and reliable open textbooks currently available in their subjects that were comparable to the print/traditional textbooks they used. It is clear that there are many, many fields and subfields with no viable and acceptable open textbooks at this time. Some faculty suggested that there is

a need for a trustworthy entity to compile and maintain easily discoverable online lists of open textbooks and online educational resources.

I could be convinced [to use an open textbook], but I just haven't seen one [in mathematics] that's convinced me yet.

The support that we get from publishers—the online homework and things like that—for more and more instructors, it's important. And people like to have the animations...It [an open textbook] needs to be of comparable quality; it has to have some of the same bells and whistles.

It would be wonderful if the students could get the same exact kind of information that they get it in textbooks that they have to pay \$100 for with the same kind of explanations and work examples and definitions and relevant pictures, graphs, whatever. I think that would be wonderful because there are wonderful things that can be done with online textbooks, and without the students having to shell out enough money to pay the rent for one month in one semester.

Faculty were generally supportive of the concept of sharing free and open knowledge and could envision open textbooks playing some role. CSU faculty, in particular, were eager to embrace an alternative to their current textbook options. Even those individuals with concerns about intellectual property, quality assurance, and author compensation were willing to use open textbooks if these issues were clearly addressed. Several faculty cited a lack of free time as a reason that they have not adopted open textbooks, since it takes time to navigate through the available options and customize them. Several community college faculty noted that seasoned instructors might be more likely to use open textbooks, while beginning instructors may prefer to use an established textbook to develop a course and anchor their teaching until they were better able to rely on lecture notes.

Where do the rights and royalties figure into all of this? And if there's something having to do with open textbooks that still ensures that the scholarship, hard work, and creative products of authors is still protected, I'm interested. If not, I'm looking for reform.

If you have an online, peer-reviewed textbook that is being updated, twice a year or maybe monthly, that would be ideal.

I end up supplementing a tremendous amount of material with just notes, so that's a primary reason for me to go to an open text.

The few faculty who have worked with open textbooks and/or open educational resources have been disappointed in the low quality or lack of easy access/usability (e.g., the ability to only print by topic). From these conversations, it was apparent that an electronic book (in any form) must, first and foremost, function like a printed book (e.g., the ability to print in its entirety). Vigorous peer review and editorial oversight are essential components for open textbooks, and it may be possible to tap disciplinary associations to serve these functions.

There were mixed perceptions about contributing to the creation of an open textbook. Some noted that seasoned instructors would be more likely to contribute. Several cited limitations of time and resources, or the need for a good editor.

The dearest commodity is time, the time to do all this stuff.

I would be delighted to maybe write an open text if I had free time, despite the fact that I do have one textbook that I really love.

They should lobby university presidents and provosts to give faculty free time. If that doesn't happen, it's just not possible.

Some at CSU suggested that their institutions could encourage faculty to contribute to the production of curricular materials by offering paid leave and/or acknowledgement in the promotion system. Some community college faculty, on the other hand, envisioned the development of open textbooks as a collective, rather than a solo, effort. A few faculty in our sample did develop their own course materials, such as lecture notes, and made them available for free to their own students and colleagues. Faculty take their commitment to teaching very seriously, and some believe their efforts to produce and customize OERs should be incentivized by their institutions as part of the teaching process.

Supporting faculty in the effort of writing and producing open textbooks could also help to saturate the market with open textbooks. Faculty sabbaticals for textbook writing, academic "credit" for open textbook publications, or low-cost technical and editorial support for faculty, as well as liaising between these faculty and open textbook publishers, are all possible incentives. The creation of a monetary "prize" or form of recognition for high-quality, well-received open textbooks in particular fields may also spur more open textbook development. Any move to incentivize open-textbook production will help create more alternatives for open-textbook consumption.

We'd like to get some remuneration for writing a textbook, at least a lower division one where there's going to be a large student base...For younger faculty, it should help you toward tenure. .

In some sense, if you're getting free time to write the book, you're getting paid.

The university only has an incentive to pay your salary and give you time to write a text book if it's going to be published because then you have something published and, you know, your name is being spread all over the place if this book gets adopted at other universities, and it says right under your name where you came from. So the university gets exposure: "One of our faculty wrote this textbook."

Also, when you tell them [high-level university administrators] you're writing a textbook, they're not happy about it. See, there are contradictory signals coming out. Let's say I tell my dean that this summer, I'm working on some research to publish an article ("That's good.") or I'm going to be working on a textbook ("Oh, you're writing a textbook to make money because you're so selfish.") Never mind what the amount is and that the quality of work will be very useful and spread the name of the university around, but I'm seen as this capitalist pig.

The fact remains that, to satisfy the diversity of needs of faculty in different fields and the different types of courses that are taught, a wider array of high-quality, easy-to-use, and reliable open textbooks will be needed before widespread faculty adoption can be realized.

### **Student needs and demands**

Faculty acknowledged that textbooks are often one of many resources students use; students have access to (and use) a variety of both good and bad resources on the Web. Faculty teach, and choose their textbooks, with that understanding. Some faculty seek out and incorporate these supplementary Web resources into their courses and/or point students to them.

CSU and, particularly, community college faculty noted the diverse demographic backgrounds and uneven preparation of their students. Consequently, they were attuned to the wide diversity

of student needs and learning styles that are present in the classroom and the challenges that arise in choosing effective curricular materials.

Most faculty perceived that students in introductory/lower-division courses needed the textbook as an anchor, especially as fundamental concepts in most fields are unchanging. Faculty mentioned that students, particularly freshmen and sophomores, want a “real” physical book, just like they want a “real” brick-and-mortar classroom. They just want it for less.<sup>10</sup> In fact, faculty recounted several instances in which students demanded hard-copy textbooks as a safety net if one was not provided or assigned by the instructor.

And, so, if you can find open textbooks, I would be really happy to use them at the graduate level, probably even at the undergraduate upper-division level. I’m not so sure about the introductory level because these kids really need something in their hands to feel secure...

Students really do buy it [the textbook] and prefer having it to give them a kind of anchor and a sense of security

Students want textbooks, not necessarily online texts.

Each course has unique values and requirements for textbook use. The nature of upper-division and graduate student coursework in some disciplines may not lend itself to a traditional textbook model, as evidenced by the extensive use of readers and other cobbled-together resources. Then again, some lower-division courses use readers, and some faculty noted that textbooks can anchor sophisticated concepts in higher level courses. In organic chemistry, for instance, students are very attached to their textbooks since they may need several routes to the content to aid understanding, and instructors do not have the time to present all of the material in one semester (and majors will want the textbook as a reference in subsequent coursework). Thus, this upper/lower division distinction may be more dependent on particular course materials or thematic subject areas than larger disciplinary divides.

At the lower levels, I think they don’t care, but I think at the upper levels, some of them prefer to have a textbook. When I mis-chose a textbook for a class—one that looked great at the outset but didn’t work out so well—the number one student says, “Well, what book can I get?” He bought three textbooks to supplement or something. So, students at the upper levels actually want to have the book. They don’t want to be looking online...And others, they love to look online and they want to find resources online. So I think there’s a mix.

That’s absolutely true at the introductory level. I mean, people need to hold on to some sort of fixed grid, because otherwise they’re desperate. As a matter of fact, even if you assign a textbook for the course, they sometimes ask you for your notes.

It really goes down to what it is that students really want from a textbook in the professional disciplines like engineering. Historically...that’s a career-long book...that would sit on their shelf and serve as a reference for fundamental concepts, a place to go and look up the equation they forgot, and it would be on their shelf for a lifetime. Those kinds of books cost a lot of money...and I find them useless now because all of that information is available online.

I explain things slightly differently than what the textbook does, and I think that’s, again, back to being flexible for the students. I have no problem explaining a concept a particular way, but another general chemistry teacher might explain it slightly differently.

<sup>10</sup> The Student PIRGs. 2008 (August). *Course Correction: How Digital Textbooks are Off Track and How to Set Them Straight*. <http://www.makertextbooksaffordable.org/newsroom.asp?id2=44596>

Different students need to have it explained in a different fashion, and the flexibility in being able to customize it, even being able to pull from different sources [is valuable]...

The ability of students to mark up hard text is important to faculty and students. Some faculty cited evidence (both from research and personal experience) that learners who actively engage with the text in this way perform demonstrably better in their courses. Some faculty expressed concern that online reading may not facilitate this type of “writing in the margins.”

Pedagogically it's proven that you do better when you read and you're active. It's not something passive. When you underline and you analyze something and watch it, that makes active learning, and students can prepare for a test better.

I definitely find that students are willing to read a PDF...But what I find, though, is...I think it's better if they highlight...and the students that do better are the ones that actually write notes and highlight, and do all that stuff. I mean, that's just my own thing. (Now, there are those with photographic memories...) They do better in class. That I can tell you. To print it out and write notes and highlight things versus just reading it...

I have exactly the same experience, the students who are really engaged in class have printed it and it's full of all this chicken scratch. And students who are far less engaged in class have the laptop with them and there's the article on the screen...

The adoption of open textbooks, ironically, will result in the need for institutional facilities (and considerable costs) that support significant amounts of printing as students prepare for classes. (One faculty member saw the move to OERs as an environmental concern due to the likelihood that much material would be printed out multiple times, often unnecessarily.) But some faculty thought that increased printing needs could be a short-term transitional “cost” as learning practices (such as reading online) or new technologies (particularly for marking up on screen) become more prevalent.

Some faculty identified themselves as having generational biases regarding the formal textbook, both as paper in the hand and as a shelf-bound resource. They also recognized that not all younger students may share these preferences (despite having students tell them they do). Several faculty mentioned “inevitable” change, in which some form of electronic learning via e-books and/or online textbooks is a “given.” Much seems to depend on the student: “serious” students may want a textbook as an ongoing in-hand resource, while other students want a cheap “good-enough” version to get them through the final exam of a required course. What emerged is that, like faculty, students’ needs are equally as diverse, and they value choice and flexibility.

Different students have different needs. There's no one textbook that fits a single need, a single course need. There are too many student variables in there.

We are thinking that our students are going to be willing to visit all of these different places and capture the information and put it all together and learn. But, you know, while we are talking about the straightjacket on faculty, actually, I was thinking backwards. I have students, and I give them an assignment that's not from the book and they complain. So that's what I'm saying...if you have all these options, I'm not sure they're going to follow them, to be honest...I think they want that [a circumscribed resource]...Who knows? I think electronic is the way to go, but I think there's going to be a lot of resistance not only from faculty, but from students.

### **Differences among sectors**

Some general impressions about differences among the three institution types (that emerged uniquely in each individual focus group) are noted below. Given the small Ns (one focus group

per institution), these distinctions are speculative at best. Differences of opinion were marked by differences in age, personality, background, region, or type of institution. Some variation of perspective may also be attributed to individual teaching experience, course content or level of course, the broader field or disciplinary area of study, or personal idiosyncrasies.

Faculty at the UC campuses seemed more homogeneous than those at the other institutions we visited. They were aware and sympathetic to concerns about textbook affordability, but did not perceive textbook cost as the most pressing financial issue facing students today.<sup>11</sup> UC faculty expressed concern about the quality of the materials they assigned to students, the (over)abundance of available resources to students, and their roles as information filterers. When faculty were prompted, open textbooks were viewed as a potential solution to affordability (one of many), but no one perceived that open alternatives addressed problems with content quality and intellectual property. Discussions around very large introductory classes that include non-majors were prevalent, and several faculty noted that institution or lecture size enabled negotiating effectively with publishers to control costs.

CSU faculty appeared to be less aware than UC faculty about what was happening in the publishing industry and open textbooks and wanted more information, but they were sympathetic to the issue of textbook affordability. These faculty emphasized textbook quality over a hasty solution to cost and were willing to expend effort to produce their own materials. CSU faculty expressed a keen interest in open textbooks, but also a concern about how open textbooks would effectively meet both their own and their students' needs. Textbooks play an important role in student feedback for CSU faculty, which could affect their advancement (via course evaluations). We got the sense from this small focus group that CSU faculty saw themselves on the "front line" of teaching and were very aware of quality issues surrounding textbooks. Individual faculty seemed to spend a lot of time thinking about how to choose textbooks and present material. They really wanted to learn more about alternatives and seemed eager to contribute to them, if they were given credit for doing so.

I have yet to ever meet an instructor who didn't want to win in the classroom and be appreciated by their students. And giving students textbooks that provide for the many possibilities for learning as possible, that is something that we would all like to do. Now, can we do it for free or can we do it for minimal cost?...That's the question that's being begged right now.

Community college faculty expressed disparate interests and perspectives. These faculty seemed attuned to a wide range of student needs, including the particular needs of English-language learners. Overall, community college instructors were interested in the idea of open textbooks and were amenable to the idea of helping with the development of these resources, though they viewed such an undertaking as a collaborative effort, not a route to sole authorship. Faculty felt they had to negotiate multiple teaching and learning styles and spent a fair amount of time thinking about how to present information effectively to students. They were skeptical about open textbooks because they want students to have a "correct" repository of information to refer to, and did not see open textbook options as yet providing an effective solution to that need.

One issue that comes up with us [community colleges] is that we have a tremendous number of English-language learners...who are not reading at grade level. The UCs, the CSUs don't have that issue...to the same extent that we do...and they're getting students who are the top 8% or whatever, so somewhere along the line, those students have

<sup>11</sup> In fact, many speculated that textbook costs have remained constant, adjusted for inflation, or have lowered as a percentage of cost for overall educational expenses and were curious to see if there were studies that explored this notion.

figured out the game. We're not dealing with the game players as much as we are all over the map. So, when we choose our book, we're looking more at that student-textbook interaction: How are the students going to look at this particular animation? What are they going to get out of this? How are they going to get the layout of the sequence of the event? I think we, at the community college level, are going to be more cognizant of that than at the UCs and the CSUs.

## **SURVEY RESULTS**

The survey consisted of 15 questions in total: 14 multiple-choice, yes/no, and open-ended questions, and one ranking question. The survey instrument can be found in Appendix A. Not all respondents answered all questions because the skip logic feature guided respondents through the survey questions as appropriate; respondents were not required to answer every question. Thus, each question represented in tables below shows the corresponding total number of responses.

The overall demographic breakdown of survey respondents (relative to the number of invitees) is shown in Table A below. The demographic breakdown of responses by question did not reveal any additional information due to the small number of respondents and, therefore, they are not included in the analysis of individual survey questions.

<b>Table A: Breakdown of Survey Invitees and Respondents</b>					
<b>Institutional Affiliation</b>	<b>Invitations N=3801</b>	<b>%</b>	<b>Responses N=224</b>	<b>%</b>	<b>Response Rate (5.9%)</b>
Community colleges (CC)	2379	62.6%	125	55.8%	5.3%
California State University (CSU)	1117	29.4%	81	36.2%	7.3%
University of California (UC)	209	5.5%	16	7.1%	7.7%
Private	35	0.9%	1	0.4%	2.9%
<b>Disciplinary Affiliation</b>					
Biology	462	12.2%	34	15.2%	7.4%
Business-related	831	21.9%	37	16.5%	4.5%
Chemistry-related	279	7.3%	14	6.3%	5.0%
Computer science-related	148	3.9%	13	5.8%	8.8%
Earth science-related	133	3.5%	9	4.0%	6.8%
Economics	155	4.1%	10	4.5%	6.5%
Geography-related	111	2.9%	9	4.0%	8.1%
Information management	194	5.1%	8	3.6%	4.1%
Math-related	1251	32.9%	71	31.7%	5.7%
Physics-related	236	6.2%	19	8.5%	8.1%
Other	1	0.0%	0	0.0%	0.0%
<b>Publication Experience</b>					
Authors	n/a	n/a	173	77.2%	n/a
Not authors	n/a	n/a	41	18.3%	n/a
Unknown/no response	n/a	n/a	10	4.5%	n/a
<b>Petition Signatory Status</b>					
Signed statement prior to survey	221	5.8%	40	17.9%	18.1%
Had not signed statement prior to survey	3580	94.2%	184	82.1%	5.1%

**Q1.** As Table 1 shows, fewer than half of the respondents were aware of the statement regarding textbook affordability. This is relatively consistent among faculty affiliated with different institutions. Only chemists (79%) and information management faculty (63%) reported more awareness of the petition than faculty in other disciplines.

Table 1: Survey Question 1					
Have you heard about the <i>Open Textbooks Statement of Intent</i> that was issued by the Student PIRGs? (See <a href="http://MakeTextbooksAffordable.org">http://MakeTextbooksAffordable.org</a> to view the statement.)					
	Yes	%	No	%	Total
Overall responses	94	42%	130	58%	224
* Of the 224 possible survey takers directed to this question, a total of 224 (100%) answered.					

**Q2.** Slightly more than half of respondents who had heard of the statement reported that they were notified by an email from the Student PIRGs. An additional 13% (N=12) discovered the statement at the campaign website. No respondents indicated that their departmental chair informed them of the statement, though a small number heard of the statement through general or conference communications (N=4) or through their institutions (N=2). Only a small percentage of respondents (4%, N=4) reported hearing about the statement upon receiving an invitation to participate in our survey.

**Q3.** Slightly more than half of the respondents (N=50, 55%) reported that the Student PIRGs' statement influenced their opinions about open textbooks. Those who signed the statement prior to taking the survey (N=24) reported at a higher rate (N=17, 71%) that they were influenced by the statement. Thirteen of the respondents also commented that the campaign reflected their sentiments.

**Q4.** Slightly more than half of the respondents (N=53, 56%) who had previously heard of the statement (N=94) did not sign it. Within this small sample, more respondents from CSUs and private institutions reported signing the statement than respondents from community colleges or the UC system. Eighteen respondents (26%) who had not signed the statement prior to the survey reported signing the statement after taking the survey. Other demographic factors did not seem to influence the response to this question.

**Q5.** Survey respondents who signed the statement reported that they were motivated primarily by textbook costs (N=35, 85%), a positive perspective about the open sharing of knowledge (N=28, 68%), and the importance of students being able to access their textbooks (N=22, 54%). Few respondents reported being motivated by being asked to sign, and no respondents reported being influenced to sign by a peer or superior.

<b>Table 5: Survey Question 5</b>		
What was your motivation for signing the <i>Open Textbooks Statement of Intent?</i> (choose all that apply)	N=41*	%**
Textbooks are too expensive	35	85%
It is important that students can access their textbooks	22	54%
Open textbooks would better fit my instructional needs	11	27%
I believe in the open sharing of knowledge as a matter of principle	28	68%
A student asked me to sign	1	2%
Someone else suggested that I sign (e.g., colleague, department chair, etc.)	0	0%
Other (please specify):	2	5%
* The total represents the number of respondents who were directed to this question by answering "yes" to Q4. Of the 41 possible survey takers directed to this question, a total of 41 (100%) answered.		
** Total percentages may add up to more than 100% since individual respondents could select more than one answer.		

**Q6.** Those who chose not to sign the statement had various reasons. Most respondents either needed more information about the statement (N=12, 23%) or simply did not want to use open textbooks in their classes (N=11, 21%). A nearly equal number of respondents (N=10, 19%) did not want their name displayed publicly. A smaller number of respondents (N=7, 12%) did not have the time to sign the statement and, presumably, follow through with the commitment to open textbooks. Others had concerns about intellectual property, did not see open textbooks as a viable solution, or did not believe that the timing was right for a switch to open textbooks. Nearly all of the survey respondents directed to this question (N=52, 98%) did not sign the statement prior to taking the survey.

<b>Table 6: Survey Question 6</b>		
Why did you choose not to sign the <i>Open Textbooks Statement of Intent?</i> (choose all that apply)	N=53*	%**
I don't want to use open textbooks for my classes	11	21%
Textbook affordability is not an important issue	1	2%
I didn't have time	7	13%
I forgot	4	8%
Someone in a position of authority (e.g., my department chair) asked	0	0%
None of my respected colleagues had signed	2	4%
I didn't want my name to be accessible online	10	19%
I did not understand the statement	0	0%
Other (please specify)	28	53%
* The total represents the number of respondents who were directed to this question by answering "no" to Q4. Of the 53 possible survey takers directed to this question, a total of 53 (100%) answered.		
** Total percentages may add up to more than 100% since individual respondents could select more than one answer.		

**Q7.** Those survey respondents who indicated that they did not sign the statement because they did not want to use open textbooks in their classes were directed to Question 7, which asked them to indicate why they did not want to use open textbooks from a series of options. A total of 11 respondents answered this question and provided varied reasons for not wanting to use open textbooks, as Table 7 shows. Most respondents (N=7, 64%) reported that they are satisfied with their current textbook. Others relied on their own supplements, indicated that there were better ways to lower textbook costs for students, and/or didn't trust the quality of open textbooks. Few respondents (N=1, 9%) marked time constraints, loss of royalties, or inability to make textbook decisions as reasons for not using open textbooks.

<b>Table 7: Survey Question 7</b>		
I don't want to use open textbooks because (choose all that apply):	N=11*	%**
I don't have time to switch to another textbook	1	9%
I have a tried and true text I use	7	64%
I use course packs or other materials that I can adapt to fit my course	3	27%
I rely on my own supplements (PowerPoint, test banks, etc.)	4	36%
Students need flashy color illustrations found in traditional textbooks to pay attention	2	18%
My students don't have online access or don't like to use e-books	3	27%
There are better ways to lower costs for students (e.g., rentals, custom/Dover publishing, course packs, etc.)	4	36%
I don't trust the quality of the content and/or accessory materials	4	36%
I am the author of a textbook that I use and I wouldn't get royalties or I rely on selling course notes to students for extra income	1	9%
There are no open textbooks available for my course(s)	0	0%
I don't make textbook adoption decisions for my department	1	9%
Other (please specify)	2	18%
* The total represents the number of respondents who were directed to this question by answering "I don't want to use open textbooks for my classes" on question 6. Of the 11 possible survey takers directed to this question, a total of 11 (100%) answered.		
** Total percentages may add up to more than 100% since individual respondents could select more than one answer.		

**Q8.** Most (N=59, 77%) survey respondents were not aware whether or not their colleagues had signed the statement. Eighteen respondents (N=23%) indicated that other faculty in their department had signed the statement.

**Q9.** Most survey respondents (N=59, 66%) were aware of discussions about textbook affordability at their institutions. Those respondents affiliated with community colleges (N=51, 57%) seemed more aware of these discussions (N=37, 73%) than their counterparts at other institutions. Those respondents affiliated with CSUs (N=29, 33%) seemed least aware (N=16, 55%).

**Q10.** The overwhelming majority of survey respondents (N=88, 95%) were not influenced in their decision to sign or not sign the statement by the list of published signatories posted on the Student PIRGs' campaign website.

**Q11.** A majority of respondents (N=187, 85%) had not assigned open textbooks at the time of the survey. Twenty (25%) CSU faculty reported assigning open textbooks. Those in computer science (N=5, 38%), business (N=9, 25%), and information management (N=2, 25%), in particular, reported assigning open textbooks. Those who signed the statement prior to taking the survey assigned open textbooks more than twice as much as those who did not.

Of those who provided comments to this question (N=35), more than three-quarters of these respondents (N=27, 77%) reported that they were open to the idea of using open textbooks and were currently using them or planning to do so in the future (N=15). Others open to the idea of using open textbooks were constrained by a lack of available open textbooks in their subject (N=7). Respondents also reported that they used alternate resources (N=6), such as lecture notes, readers, or outdated texts as a means to provide affordable textbook choices.

**Q12.** An overwhelming majority of respondents (N=209, 95%) indicated that they would be willing to use open textbooks that mirrored the quality and functionality of traditional textbooks. There appears to be no measurable difference based on respondents' institutional or disciplinary affiliations, publication experience, or whether or not they signed the statement. Respondents offered myriad explanations, including issues of quality, cost, and access.

<b>Table 12: Survey Question 12</b>					
Would you consider assigning an open textbook for any of the classes that you teach if the only change (to your traditional textbook) was the manner in which students could access it (online, downloadable, printable, affordable, etc.)?	Yes	%	No	%	Total
<b>Overall responses</b>	<b>209</b>	<b>95%</b>	<b>11</b>	<b>5%</b>	<b>220</b>
* Of the 224 possible survey takers directed to this question, a total of 220 (98%) answered.					

**Q13.** Survey takers reported that the most important features in textbooks are the quality of content (N=212, 95%) and graphics/illustrations (N=157, 70%). The ability to adapt contents to course needs (N=104, 46%), the ability to integrate personal materials, including interactive data (N=95, 42%), and the author's reputation (N=91, 41%) were also seen as useful features. Comments reiterated the importance of these features. The imprimatur of the publisher (N=29, 13%) and integration of social networks (N=34, 15%) were reported as least important.

<b>Table 13: Survey Question 13</b>		
What features in an open textbook would be necessary for you to consider it a viable choice for your class(es)? (choose all that apply)	N=224	%
Name/reputation of author	91	41%
Brand/reputation of publisher	29	13%
Quality of content, including editorial review	212	95%
Illustrations and other graphics (e.g., charts, tables, diagrams, photographs, animations, video, etc.)	157	70%
The flexibility to adapt the textbook to contain only chapters and materials relevant to my course	104	46%
The ability to integrate my own teaching materials and supplements, such as PowerPoint slides, self-grading homework, test banks, etc.	95	42%
Printing quality/looks like a traditional book	76	34%
The inclusion of supplementary materials, such as test item files and slides	85	38%
The ability to modify content to suit local circumstances	62	28%
The ability to have open commenting by a community of users (e.g., social networks) to suggest improvements and modifications to the textbook's content	34	15%
* Of the 224 possible survey takers directed to this question, a total of 224 (100%) answered.		

**Q14.** Survey respondents, when asked to rank textbook features that most or least needed to change, reported that textbooks need to be lower priced (N=74, 41%), and that new editions should be strategically issued (N=55, 28%). The need for modifiable content (N=48, 24%) and access to specific chapters (N=30, 18%) were rated by respondents as less in need of change.

**Table 14: Survey Question 14 (merged responses)**

Below is a list of options/features in current textbooks. Please rank the option that, in your opinion, most needs to be changed or improved with a "9," then continue ranking options in decreasing order of importance. (1=little or no change needed, 9=most change needed; each number can only be used once.)

	Little or no change needed (sum of 1-3)	Some change needed (sum of 4-6)	Most change needed (sum of 7-9)	Don't Know
I want access to only the chapters that I need	<b>66</b> 40%	<b>50</b> 30%	<b>38</b> 23%	<b>10</b> 6%
The availability of unbundled versions	<b>41</b> 25%	<b>57</b> 35%	<b>44</b> 27%	<b>22</b> 13%
The addition of multimedia content	<b>44</b> 27%	<b>62</b> 37%	<b>40</b> 24%	<b>18</b> 11%
Less watered-down content	<b>52</b> 30%	<b>62</b> 35%	<b>40</b> 23%	<b>17</b> 10%
Lower cost	<b>27</b> 15%	<b>21</b> 12%	<b>118</b> 65%	<b>16</b> 9%
More variety (textbooks all seem the same)	<b>56</b> 33%	<b>58</b> 34%	<b>40</b> 23%	<b>18</b> 10%
Updated material/fewer errors	<b>43</b> 24%	<b>70</b> 39%	<b>52</b> 29%	<b>16</b> 9%
New editions only when necessary	<b>30</b> 16%	<b>34</b> 18%	<b>115</b> 58%	<b>17</b> 9%
Modifiable content that can be updated by the community of users	<b>90</b> 44%	<b>51</b> 24%	<b>38</b> 18%	<b>23</b> 11%

## APPENDIX: SURVEY INSTRUMENT

### SURVEY QUESTIONS

**1) \* Have you heard about the Open Textbooks Statement of Intent that was issued by the Student PIRGs? (See <http://MakeTextbooksAffordable.org> to view the statement.)**

- a. Yes (skip to 2)
- b. No (skip to 11)
- c. Comment

**2) How did you first hear about the *Open Textbooks Statement of Intent*? (choose one)**

- a. Email invitation from Student PIRGs
- b. Department Chair
- c. Colleague
- d. Student
- e. Article in newspaper or blog
- f. At <http://maketextbooksaffordable.org> (the Student PIRGs' campaign website)
- g. Other, please specify:

**3) Did the *Open Textbooks Statement of Intent* influence your thinking on open textbooks?**

- a. Yes
- b. No
- c. Comment

**4) \* Did you sign the *Open Textbooks Statement of Intent*?**

- a. Yes (skip to 5)
- b. No (skip to 6)
- c. Comment

**5) What was your motivation for signing the *Open Textbooks Statement of Intent*? (choose all that apply)**

(skip to 8)

- a. Textbooks are too expensive
- b. It is important that students can access their textbooks
- c. Open textbooks would better fit my instructional needs
- d. I believe in the open sharing of knowledge as a matter of principle
- e. A student asked me to sign
- f. Someone else suggested that I sign (colleague, department chair, dean, etc.)
- g. Other. Please specify

**6) Why did you choose not to sign the *Open Textbooks Statement of Intent*?**

- a. I don't want to use open textbooks for my classes (skip to 7, all others skip to 8)
- b. Textbook affordability is not an important issue
- c. I didn't have time
- d. I forgot
- e. Someone in a position of authority (e.g., my department chair) asked me not to sign
- f. None of my respected colleagues had signed
- g. I didn't want my name to be accessible online
- h. I did not understand the statement
- i. Other. Please specify

**7) I don't want to use open textbooks because:**

- a. I don't have time to switch to another textbook
- b. I have a tried and true text I use
- c. I use course packs or other materials that I can adapt to fit my course
- d. I rely on my own supplements (PowerPoint, test banks, etc.)
- e. Students need flashy color illustrations found in traditional textbooks to pay attention
- f. My students don't have online access or don't like to use e-books
- g. There are better ways to lower costs for students (e.g., rentals, custom/Dover publishing, course packs, etc.)
- h. I don't trust the quality of the content and/or accessory materials of a low-cost or no-cost alternative
- i. I am the author of a textbook that I use and I wouldn't get royalties or I rely on selling course notes to students for extra income
- j. There are no open textbooks available for my course(s)
- k. I don't make textbook adoption decisions for my department
- l. Other (please specify)

**8) To the best of your knowledge, did other faculty in your department sign the *Open Textbooks Statement of Intent*?**

- a. Yes
- b. No
- c. Comment

**9) Are you aware of discussions about textbook affordability (among administrators) in your department or college?**

- a. Yes
- b. No
- c. Comment

**10) Did the list of signatories from the *Open Textbooks Statement of Intent* on the Student PIRGs' website (<http://MakeTextbooksAffordable.org>) influence your decision to sign the statement?**

- a. Yes
- b. No
- c. Comment

**11) Do you currently, or have you ever, assigned an open textbook for any of the classes that you teach?**

- a. Yes
- b. No
- c. Comment

**12) Would you consider assigning an open textbook for any of the classes that you teach if the only change (to your traditional textbook) was the manner in which students could access it (online, downloadable, printable, affordable, etc.)?**

- a. Yes
- b. No
- c. Comment

**13) What features in an open textbook would be necessary for you to consider it a viable choice for your class(es)? (choose all that apply)**

- a. Name/reputation of author
- b. Brand/reputation of publisher
- c. Quality of content, including editorial review
- d. Illustrations and other graphics (e.g., charts, tables, diagrams, photographs, animations, video, etc.)
- e. The flexibility to adapt the textbook to contain only chapters and materials relevant to my course
- f. The ability to integrate my own teaching materials and supplements, such as PowerPoint slides, self-grading homework, test banks, etc.
- g. Printing quality/looks like a traditional book
- h. The inclusion of supplementary materials, such as test item files and slides
- i. The ability to modify content to suit local circumstances
- j. The ability to have open commenting by a community of users (e.g., social networks) to suggest improvements and modifications to the textbook's content
- k. Other. Please specify

**14) Below is a list of options/features in current textbooks. Please rank the option that, in your opinion, most needs to be changed or improved with a "9," then continue ranking options in *decreasing* order of importance. (1=little or no change needed, 9=change is most needed; each number can only be used once.)**

- a. I want access to only the chapters that I need
- b. The availability of unbundled versions
- c. The addition of multimedia content
- d. Less watered-down content
- e. Lower cost
- f. More variety (textbooks all seem the same)
- g. Updated material/fewer errors
- h. New editions only when necessary
- i. Modifiable content that can be updated by the community of users

**15) To help us better understand your answers to the previous questions, please provide the following information:**

- a. Type of courses taught
- b. Number of courses taught (per year)
- c. Average number of students taught (per course)
- d. Total number of textbooks you have authored