MARKETING PLAN FOR

WRITTEN BY: Jerry Bridgman, Robert Brockman, II,
Jennifer Lewis, Nathan Pope, and Gaurav Sharma

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SCOPE OVERVIEW

For our marketing project assignment, we partnered with OpenStax College (known throughout this document as "OpenStax"), a non-profit organization affiliated with Rice University with whom a teammate shared several connections. We initially met with David Harris, Editor-in-Chief of OpenStax, and together we discussed the following objectives for our marketing project:

- **Create sustainable revenue streams**: We aimed to identify new areas of potential revenue for OpenStax and to analyze its pricing structure, without deviating from OpenStax's primary goal of providing quality, open-source textbooks at a very low cost.

- **Increase rate of textbook adoption**: We sought to understand the reasons why the textbooks have or have not been adopted at various institutions so the adoption rate can be increased.

- **Expand awareness**: We aimed to identify areas for marketing improvements so that awareness of the OpenStax brand and its products can be expanded.

The purpose of this report is to present the significant findings, observations, and key recommendations that came to our attention throughout the project. The majority of our textbook-specific recommendations reference the OpenStax *College Physics* textbook because it is currently in circulation, but these recommendations also apply to OpenStax's other book, *Sociology,* and future books, *Biology* and *Anatomy and Physiology*.

SUMMARY OF KEY RECOMMENDATIONS

1. Focus marketing efforts on professors for Texas universities and community colleges

Because course instructors and professors are the key decision makers for deciding which textbooks students purchase, OpenStax should concentrate its marketing efforts on convincing course instructors to adopt OpenStax's textbooks as their required textbook. Compared to private universities, state and community colleges tend to be larger in size, greater in number, and have larger class sizes and are therefore more efficient to target. Since textbook decisions for high school advanced placement (AP) courses are largely made at the district level, targeting the administrators of these programs is also prudent. There are abundant opportunities for OpenStax to improve its textbook adoption rate in Houston, home to two of the nation's largest community college systems, and throughout Texas, where Rice's reputation is strongest. We were surprised that the Rice and University of Houston ("UH") physics professors we interviewed had never been asked to examine OpenStax books before.

2. Develop more supplementary materials that will complement the textbooks

OpenStax should make developing turnkey supplementary materials for the textbooks a priority. Many professors now consider these supplementary materials, which include test banks, lesson plans, PowerPoint presentations, and homework problems with automated grading services, to be a mandatory complement to textbooks. These supplementary materials should be viewed as required component of the textbooks rather than a selling point. The UH professors we talked to indicated that if these supplementary materials were available, there was a high likelihood that their textbook committee would adopt OpenStax's *College Physics* for 2013-2014.

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3. Charge students reasonable prices for downloadable PDF copies of the textbooks

"Open source" is not the same as "available for free." To cover operating costs and adapt to the shift away from printed materials, OpenStax should charge approximately $10 for downloadable copies of its textbooks. This price better reflects the books' true value to the students while still remaining substantially cheaper than competing books. Charging a nominal fee for PDFs would also increase the perception of quality. The web versions of the text should remain available for free, and none of the materials should be encumbered with digital rights management software. OpenStax cannot expect to maintain a healthy operating budget without revenue from downloaded content.

4. Hire a sales representative to visit Texas professors in person

Professors tend to have a bias against open source educational material, believing that the material is of lower quality than that provided by traditional publishing. Overcoming this bias by demonstrating the quality and additional features of OpenStax textbooks can best be accomplished in person. Given the relatively small number of decision makers (e.g. professors) involved in textbook selection, OpenStax should recruit a professional salesperson to meet with and develop relationships with strategic customers. During these sales visits, professors should be given a free print copy of the books. One salesperson for the Texas region could conservatively generate approximately $90,000 in top-line revenue over the next twelve months from the *College Physics* textbook alone, while simultaneously ensuring that the majority of decision makers in Texas are aware of the book.

5. Redesign Covers of College Physics Textbook

OpenStax should list the contributing authors to the textbook on the front cover. The reputation of the textbook author is a strong consideration to professors in their textbook decision, and we were frequently asked who wrote the book. Prominently displaying the authors on the cover will add credibility to the textbook and will eliminate initial ambiguity from professors. OpenStax should also consider seeking reviews and endorsements to *College Physics* from well-known physics professors or industry experts and quote them on the back cover. Publicizing endorsements from reputable professors could make the difference for a potential professor on-the-fence about adoption.

6. Restructure marketing materials to showcase textbook quality, supplementary materials, and professor reviews

During sales meetings, professors should be provided with a brochure detailing how the particular OpenStax textbook under consideration compares with competing books, with special emphasis on the available supplementary materials. Because professors typically place considerable weight on authors' reputations and recommendations from peer faculty when making textbook decisions, the sales brochures, if not the books themselves, should prominently promote the authors as well as endorsements from well-known faculty. OpenStax should leverage the prestige of the Rice University brand, particularly in the Texas market, and prominently feature the affiliation with Rice in its brochure. Analogous changes should be made to the OpenStax web site to reflect these priorities.

OPTIMAL CUSTOMER SEGMENTATION

Course Instructors are Key Decision Makers

In order to expand awareness and increase adoption of OpenStax textbooks, it is important to have a deep understanding of who OpenStax's customers are and how they behave. The textbook market is unusual in that the people who use and pay for textbooks, the students, are generally not the primary determiners of what textbooks are adopted. The key decision makers are the course instructors, who are typically responsible for mandating textbooks for a given class. Because of this, the most important market research issue is determining what factors influence instructors' adoption of textbooks.

In 2013 OpenStax can reach its marketing goals by honing in on which schools' professors should be the target of sales efforts. We recommend concentrating marketing efforts on instructors at state and community colleges and for high school Advanced Placement (AP) courses. State and community colleges are abundant and tend to have much higher levels of enrollment than private universities, meaning that adoption by one department exposes more students to OpenStax textbooks. In addition, because 40% of students at community college are unable to contribute financially to their education, these schools are a market in which OpenStax can have the greatest impact through its low-cost, high-quality textbooks (Quick Facts, 2009). Since *College Physics* is already on the CollegeBoard list of approved AP textbooks, OpenStax should also focus sales efforts on decision-makers for state public school districts who are looking for quality materials and working under tight budgets.

Abundant Opportunities in Texas

More specifically, OpenStax can most effectively raise the rate of textbook adoption by concentrating on state universities, community colleges, and high school districts located here in Texas. As the phrase goes, "Everything is bigger in Texas," and our school systems are no exception. This year, there are approximately 570,000 students of public colleges and universities in Texas, compared to only 124,000 students of private institutions (Participation Forecast, 2011). The greater Houston area is home to two of the top ten largest community college systems in the United States ("Largest Community Colleges"). As for AP courses, twenty of the top 100 largest public school districts in the nation are located in Texas (Selected statistics, 2008). The market opportunity in OpenStax's home state is too large and too close to ignore.

Based on size and proximity, we recommend OpenStax begin by targeting decision-makers at the following Texas schools as soon as possible:

Table 1		
Target Schools for Immediate Action		
State Universities	**Community Colleges**	**High School AP Programs**
The University of Houston	Houston Community College	Houston Independent School District
Texas A&M University	Lone Star Community College	Cypress-Fairbanks Independent School District
The University of Texas at Austin		Dallas Independent School District

TURNKEY SUPPLEMENTARY MATERIALS

Typical textbooks used today in America's university classrooms often come with much more than just text. Textbooks are now often sold with supplementary materials, including:

- Separate databases of homework problems with the supporting solutions (either online or a in a complementary book)
- Online automated grading solutions for homework problems
- Quiz and/or test banks
- PowerPoint, videos, and/or outlines which professors could integrate into lesson plans

As part of our market research, we interviewed 23 professors to determine how they select a textbook for their course and gauged their perceptions of open-source textbooks (refer to *Appendix A* for a summary). During these interviews, an important theme emerged: the majority of the professors we polled consider the availability of integrated supplementary materials to be a required feature of modern textbooks. Several professors indicated they would not consider an open-source textbook for adoption without these materials.

Physics Professor Feedback on the OpenStax's *College Physics* Textbook
We met with University of Houston physics professors Dr. Gemunu Gunaratne and Dr. Rebecca Forrest. Both were impressed with the quality of the book and expressed enthusiasm for OpenStax's goal of solving the problem of textbook affordability. They each stated that only the lack of existing supplementary materials to the book would prevent it from being considered for adoption by their textbook committee for the 2013-2014 school year.

Dr. Gunaratne explained recent budget constraints to public Texas universities and colleges have forced administrators to cut budget funding for teaching assistant (TA) positions, and professors heavily rely on them for grading and other administrative duties. Since the duties of collecting and grading student homework problems are now separated from the professors, supplementary materials to the textbooks are important for operational efficiency at universities. This is particularly critical for a physics textbook as it is quantitatively focused.

We also met with Dr. Paul Padley and Dr. Karl Ecklund of Rice University. Although Rice University's introductory physics class is calculus-based and thus not a suitable candidate for adopting OpenStax's *College Physics*, the Rice professors expressed concerns similar to those of the UH professors. Dr. Ecklund, who recently taught the physics for non-engineers class, stressed how the availability of online homework submissions and automated grading provided by their selected textbook had reduced costs and administrative overhead. Dr. Padley was initially suspicious of the quality of *College Physics*, but after further examination found it to be quite adequate. He was especially impressed by the sizable number of embedded links to interactive PhET physics demos provided by the University of Colorado. The use of these demos is an important demonstration of the power of open-source collaboration and should be prominently featured in OpenStax's marketing materials.

Value Proposition

Based on this feedback, it is clear that supplementary materials for OpenStax textbooks must be considered a point-of-parity, rather than a point-of-difference, in its value proposition. In marketing vernacular, a company's value proposition answers the question of why its target customers should prefer the company's particular product to those of its competitors. Points-of-parity are product attributes held in common with other competing products and which customers require (e.g. a hotel cannot differentiate itself by offering a clean room, because that is a required point-of-parity by travelers). OpenStax should consider supplementary materials to the textbook a point-of-parity, along with quality content. In contrast, points-of-differentiation are those aspects of a product in which it enjoys a comparative advantage over its competitors. The points-of-differentiation for the OpenStax value proposition are its affordability and the absence of licensing restrictions.

Deploying More Supplementary Materials

OpenStax should prioritize discussions with outside providers of supplementary materials so that they can be made available as soon as possible. Following Flat World Knowledge's model, these supplements should be purchasable through the OpenStax web site as part of a bundle including the textbook. We understand OpenStax has had recent discussions with Expert TA, a company that provides online homework and grading solutions for math and physics problems. Several professors mentioned *Quest Learning & Assessment,* a service provided by the University of Texas, as another potential partner. Quest Learning & Assessment provides an online database of physics questions and answers, lectures to students for prerequisite knowledge, and various resources for physics instructors. These materials are free for instructors and cost $25 per course for students. More information can be found at https://quest.cns.utexas.edu/.

REVISED PRICING STRATEGY

OpenStax should begin charging a nominal fee for downloading textbooks in PDF and other electronic book formats, while retaining its present free pricing for web-only access and cost pricing for soft-cover print versions. In addition, OpenStax should consider offering hardbound deluxe versions at a much higher price. These changes will help dispel any concerns about product quality that professors currently have with open-source content.

Open Source vs. Free

We understand the resistance that OpenStax has to charging students for PDF and electronic book formats, since the entire purpose of the initiative is to decrease the cost of student education. However, the company needs to generate operating cash flows from something, and thus far the print versions have failed to generate sufficient revenue. Because the future of textbook publishing is digital content, charging for downloads is the logical source of future revenue.

"Free software is a matter of liberty, not price. To understand the concept, you should think of free as in free speech, not as in free beer."

--Richard Stallman
Open-Source Pioneer
(The Free Software Definition, 2012)

In order to remain true to the open source concept, however, OpenStax must never employ copy-protection measures, known as digital rights management (DRM), for any of its versions. So long as the download fee remains nominal, it should not interfere with professors' adoption of the material, nor should it be an impediment to student purchases. Dr. Forrest at UH stated she believed the difference between free and $10 was negligible when considering textbook price.

Web-only access to the material should remain free, which remains consistent with OpenStax's mission and will ensure continued support from charitable foundations. If it becomes obvious that the vast majority of students are unwilling to pay the nominal fee for downloading their own copy, the foundations should be presented with a blunt choice: either fund the operations budget or abandon the web-only distribution.

Free vs. Cheap

We understand the goal of OpenStax (and the open source movement in general) is to improve the accessibility of information to interested users. For college textbooks, accessibility means the adoption of OpenStax titles for their courses, thereby protecting students from high textbook prices. Unfortunately, offering textbooks for free may paradoxically limit accessibility: people tend to perceive free or very low-cost products as having a lower quality than products in a normal price range (Gorn, Tse, & Weinberg, 1990). Since most professors we interviewed indicated textbook quality is the most important factor in choosing a title for their course, OpenStax's current price structure is likely hindering adoption. In economic terms, at the current prices the textbooks are very unusual in that they have a "positive price elasticity" -- meaning that increasing the price will actually increase customer demand!

Charging a nominal fee for PDF and ebook versions of the textbooks will help overcome the perception among professors that the book is "cheap." The content will still be available for free via Connexions, but the association of a nominal fee with the textbook will increase its perceived value in the minds of professors and students. This increased perceived value can be reinforced by producing a deluxe hardcover version of the books and offering it for a price much closer to that of traditional textbooks. We do not expect OpenStax to sell many copies of this version: the purpose is to make the softcover print and downloadable versions seem like a real bargain. OpenStax's closest commercial competitor, Flat World Knowledge, uses this strategy.

Undercutting the Competition

Notwithstanding the above discussion, OpenStax's primary competitive advantage remains low cost, so all versions of the textbooks should be priced significantly below the competition. Flat World Knowledge charges $35 for downloadable versions of most of its online science textbooks, but these versions are bundled with supplementary content. However, since they charge $20 for the online-only version and supplementary content and recently revoked offering free online content altogether, we can infer they consider the ability to download the ebook and PDF versions to be worth around $15. Charging around $10 for OpenStax PDF and iBook versions thus seems reasonable.

The print versions should be offered at a price point that is somewhat cheaper than used copies of similar textbooks. For example, the current physics book used by professors at UH, *Physics with Mastering Physics (4th Edition)*, is available from Amazon.com at a new hardcover price of $187.69. A new softcover version is even *more* expensive, coming in two volumes which together total $236.66. Note that these are not list prices, but reflect a ~30% Amazon discount. Used copies of the combined softcover book are available for $110. The current $50 price for the price of the color paperback version of OpenStax *College Physics* should provide a significant advantage over the used textbook market.

TEXAS SALES PROJECTIONS AND BUDGET

Hire a Texas Sales Representative

Several of the professors we interviewed stated they suspected open-source textbooks were of lower quality than traditionally published textbooks, although several admitted their hunch was not based on any empirical evidence. OpenStax can overcome this professor bias and most effectively persuade instructors of their textbooks' differentiating values via face-to-face meetings. Therefore, OpenStax should hire a direct salesperson to work specifically with the vast numbers of professors and instructors at Texas state and community colleges. Hiring a direct salesperson will be the most efficient way to promote the textbooks at a large portion of these institutions while keeping management free to manage the business.

Identify Key Decision Makers First

OpenStax should first hire the direct salesperson or another resource to identify key decision makers. This will entail significant research of identifying and logging contact information for textbook committee chairs, department chairs, senior professors, and other key players at Texas state and community colleges, as well as public school district officials responsible for making high school advanced placement course textbook decisions. For example, we discovered through our interviews with UH professors that Dr. Donna Stokes chairs the physics textbook committee there; OpenStax should eventually pursue a meeting with her.

OpenStax should prioritize this target list of key people and send off its salesperson to establish relationships and meetings with them. Initially, the salesperson should focus on Houston institutions because of scale and proximity factors. (Houston Community College and the Lone Star Community College system are among the nation's largest community colleges.) The salesperson should ideally be knowledgeable about physics, be very familiar with the *College Physics* textbook, and leave a free print copy and brochure with the instructor.

Student Estimated Market Size

The *College Physics* textbook can be used as an example of how to analyze the Texas market and estimate realistic sales projections over the next twelve months. The state of Texas provides estimates for how many students are enrolled in universities and community colleges throughout the state, and the American Institute of Physics provides statistics on how many students are enrolled in introductory physics courses (Nicholson and Mulvey 2012). By comparing the 2010 estimates for physics enrollments for several of the largest schools, we estimate the approximate proportion of students currently enrolled in introductory physics courses to total enrollment is 6.7%, as shown in *Table 2* on the following page:

Table 2		
University	**2010 University Enrollment**	**Introductory Physics Enrollment 2010-2011**
University of Houston	38,758	3,441
Texas A&M College Station	49,383	3,528
University of North Texas	36,118	2,259
Texas Tech University	31,700	2,096
Texas State University	32,580	2,100
UTSA	30,395	1,951
UTEP	22,106	1,183
Sam Houston State	17,282	921
UT Dallas	17,710	1,016
Total	**276,032**	**18,495**
% enrolled in introductory Physics courses		6.7%
Adjust to 3% due to non-qualifying Calculus-based courses		3.0%
Estimated total Texas college enrollment		1,500,000
Estimated market size for OpenStax *College Physics* next year		**45,000**

The *College Physics* textbook is algebra-based, and engineering students and physics majors often start with calculus-based physics courses; therefore, the book is not appropriate for all students in physics classes. Additionally, community colleges and other 2-year programs might have a higher percentage of students in algebra-based physics programs. Given these considerations, we adjusted the figure above to conservatively estimate approximately 3% of Texas college students should be in the market for OpenStax's textbook. Therefore, based on the 2012 estimated total college enrollment in Texas of nearly 1.5 million (Texas Higher Education 2011), at least 45,000 students in Texas should be able to use textbook for the next school year.

Estimated Market Size for Physics Instructors

Although this number of students is useful for projecting textbook sales volume, the number of classroom physics instructors is a better indicator of the number of decision makers needed to be contacted and persuaded to adopt the book. The American Institute of Physics estimates there are approximately 5,600 PhDs in physics who teach in American universities (AIP 2012). Given that Texas comprises 8.1% of the US population (based on the 2010 US census data) and assuming that the student-teacher ratio in Texas is comparable to the rest of the nation, there should be approximately 454 university physics teachers in Texas. Perhaps one-quarter will be involved in teaching introductory courses, so the number of instructors who should be contacted might approximate 113. Since many colleges are much smaller and have smaller classes, only the largest 80% of instructors should be contacted, based on class sizes, which will still enable excellent market penetration.

Over the next twelve months, one salesperson can reasonably be expected to meet with half of these physics instructors (approximately 45). If half of those 45 instructors can be sold on the book's quality and extremely low price, then approximately 23 of the estimated 113 (20%) physics classrooms in Texas could be converted to using OpenStax *College Physics* as soon as next school year. This could translate into sales of 9,000 textbooks, or $90,000 in revenue at the $10 PDF price point, which would more than cover the salesperson and certain other operating costs (refer to *Table 3* below). Targeting professors with the largest class sizes will further improve these figures.

Table 3

Category / Assumption		Amount
PhD Physics Instructors in U.S.		5,600
Texas proportion of U.S. population		8.1%
Estimated PhD Physics Instructors in Texas		454
Estimated portion of Texas Physics Instructors in Intro-level courses		25%
Estimated Intro-level Physics Instructors in Texas		113
Contact the top 80% of Instructors (based on total student enrollment)		91
Successfully meet with half (50%) of Instructors contacted		45
Of the Instructors met with, half (50%) adopt		23
Approx. ratio of adopting Instructors to total (23/113)		20.0%
Apply this ratio to estimated market size for textbook (45,000 students)		9,000
Estimated sales revenue assuming a $10/PDF price	**$**	**90,000**

A similar analysis can be performed for the *Sociology* book as well as the future books, *Biology* and *Anatomy and Physiology*. Adding additional books should increase the contact efficiency of the sales force considerably.

Estimated salesperson costs

The primary costs of sending a salesperson to Texas state and community colleges will include compensation, travel, cost of demo textbooks, and marketing materials such as brochures, etc. (refer to *Table 4* below). OpenStax can expect to pay one full-time salesperson compensation and commissions in the range of $50,000 - $60,000, depending on the number of meetings set up and the success rate of new textbook adoptions. Travel expenditures for a salesperson visiting schools across Texas could approximate $5,000 over the next twelve months. Demo textbooks could cost approximately $2,000, based on around 50 sales meetings (see *Table 3* on the previous page) at a cost of $40 per book (cited by Mr. Harris as the approximate variable printing cost). The total estimated expenses for one salesperson to cover the Texas market over the next twelve months should be approximately $58,500 to $68,500.

Table 4

Category / Assumption	Amount
Salesperson compensation	$50,000 - $60,000
Travel	$ 5,000
Demo textbooks	$ 2,000
Market research	$ 1,000
Marketing materials, other	$ 500
Estimated Salesperson Costs	**$58,500 - $68,500**

TEXTBOOK COVER DESIGN CHANGES

Improvements to the Front and Back Cover

OpenStax should list the most prominent contributing authors to the textbook on the front cover. The reputation of the textbook author is a strong consideration to professors in their textbook decision. For example, when we interviewed Dr. Forrest of UH about OpenStax *College Physics*, she immediately asked about the author. Right now the contributing authors are only listed in the Preface section, which takes time to locate. Prominently displaying the authors on the cover will add credibility to the textbook and will decrease initial ambiguity from professors.

Currently the most prominent item on the back cover is a paragraph describing the mission of OpenStax. This statement is wordy and in small font, making it difficult to read. It should be replaced with a more eye-catching slogan or set of key phrases. The Rice logo on the back cover is important for the book's credibility and should be made more prominent.

The remainder of the back cover should consist of quotes from reviews and endorsements of the book by well-known professors or industry experts, since professors give substantial weight in their textbook decision to opinions of their peers. Publicizing an endorsement from a reputable professor could make the difference for a potential professor on-the-fence about adoption. Such endorsements are not uncommon: Dr. Padley stated that he has been called on to provide professional feedback for undergraduate physics textbooks in the past, and has provided endorsements for books he considered to be of high quality.

In the course of our research and discussions, several students and professors commented that the use of "College" in OpenStax College's brand is confusing, particularly when displayed in the logo atop the *College Physics* textbook. Several questions arose to whether OpenStax College was an actual college institution that offered classes. OpenStax should adjust its logo atop its textbooks by removing the word "college."

BRANDING AND PROMOTIONAL CONSIDERATIONS

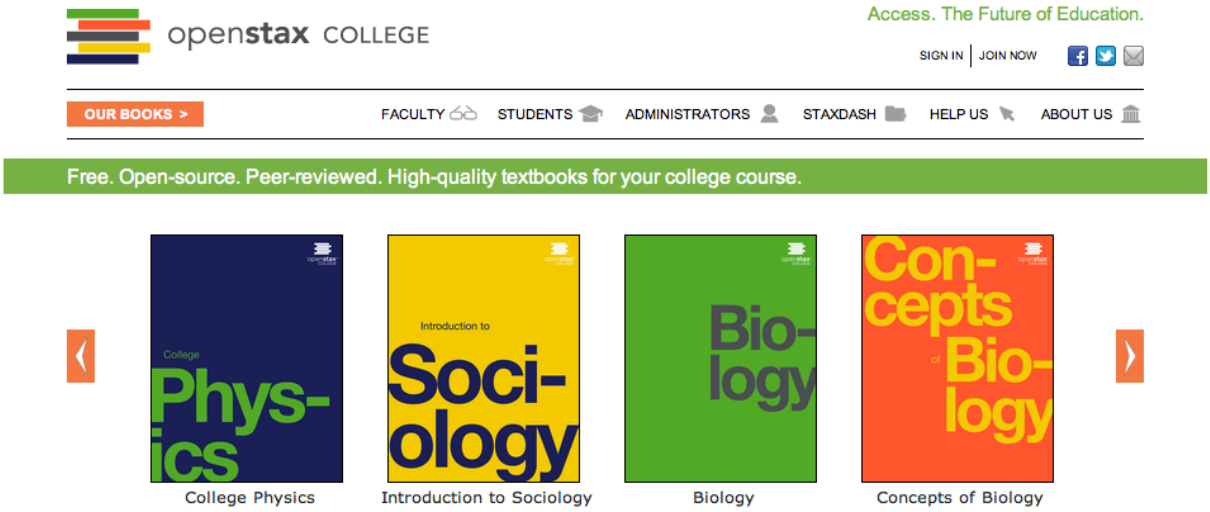
Promote Interactive Content and Ongoing Efforts to Develop Supplementary Materials
OpenStax should promote the interactive elements already contained in its *College Physics* textbook. Although several professors were impressed the book contained links to online PhET simulations, OpenStax's marketing materials do not mention these important features. This content could help satisfy the demands of professors for interactive content and other supplementary materials. OpenStax should also promote its ongoing efforts to partner with outside organizations to develop turnkey supplemental materials. This could generate some buzz from potential adopters in the professor community and will demonstrate OpenStax is aware of what professors demand with open-source textbooks.

Promote Affiliation with Rice and Textbook Authors
In our research, several professors indicated that OpenStax's association with Rice was alone enough to convince them of the high quality of the textbooks. This affiliation will be especially important in 2013 as OpenStax focuses on gaining adoption in Texas schools, where professors are likely to think highly of the Rice University brand. OpenStax should consider promoting or advertising its connection with Rice University more as it begins targeting Texas state and community colleges.

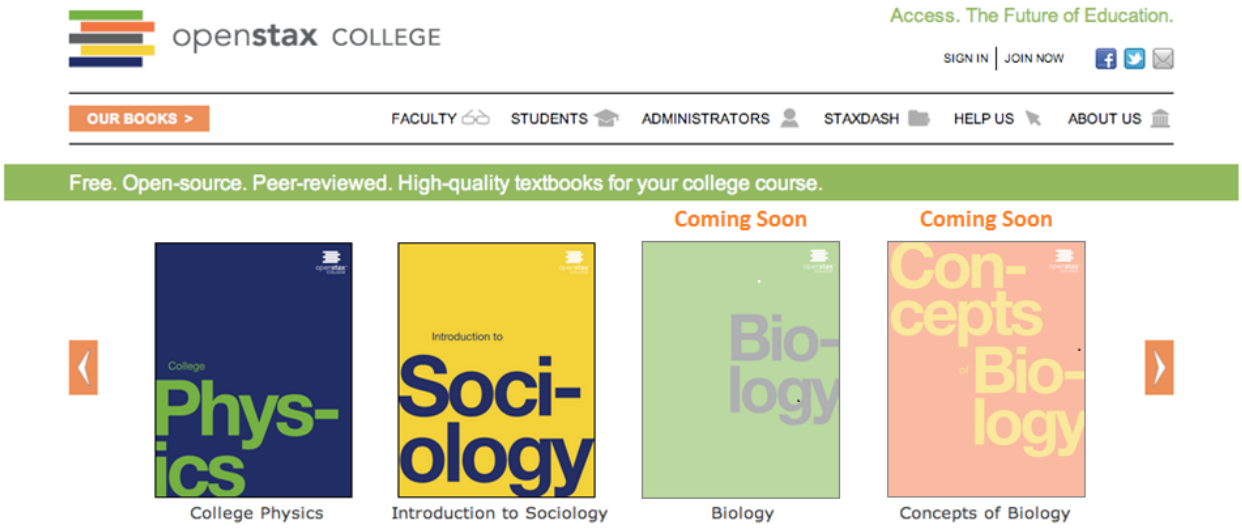
Additionally, OpenStax should promote its textbook contributing authors online. The faculty link site indicates the books "undergo a peer-review process...from a variety of active instructors." But the actual professors involved in the writing and review process are unlisted outside of the book itself. Since professors often refer to textbooks by the last name of the author, this name should figure heavily in promotional materials.

Customer Website Improvements
We identified several minor improvement opportunities of the OpenStax brand via its website. The OpenStax brand, as presented on the website and on the covers of the textbooks themselves, is appealing, modern, and is one of the organization's key assets. Through branding, OpenStax presents itself as not just another textbook company, but a non-profit concerned with bringing real value to students. This message is crucial, and the brand will strengthen as the brochure and sales force reiterate it. The suggestions on the following pages should help improve OpenStax's website branding.

When visitors click “Our Books” on the main page, they are taken to a vertically scrolling list of textbooks OpenStax offers:



While the visual depiction of the titles is appealing, it appears that all five titles are currently available to students and professors. This is misleading since, at the present time, only *College Physics* and *Introduction to Sociology* are available for download. We recommend more clearly denoting which books have been published and which are not yet available to avoid the potential for customer confusion and frustration:



Another minor improvement to this particular section would be to disable the circular scrolling mechanism. Presently, the list of titles scrolls continuously through the same five titles. This is misleading to a customer interested in OpenStax, as it appears that there are many titles available. Instead of continuous scrolling, we simply suggest that the list scroll through the five titles and then stop.

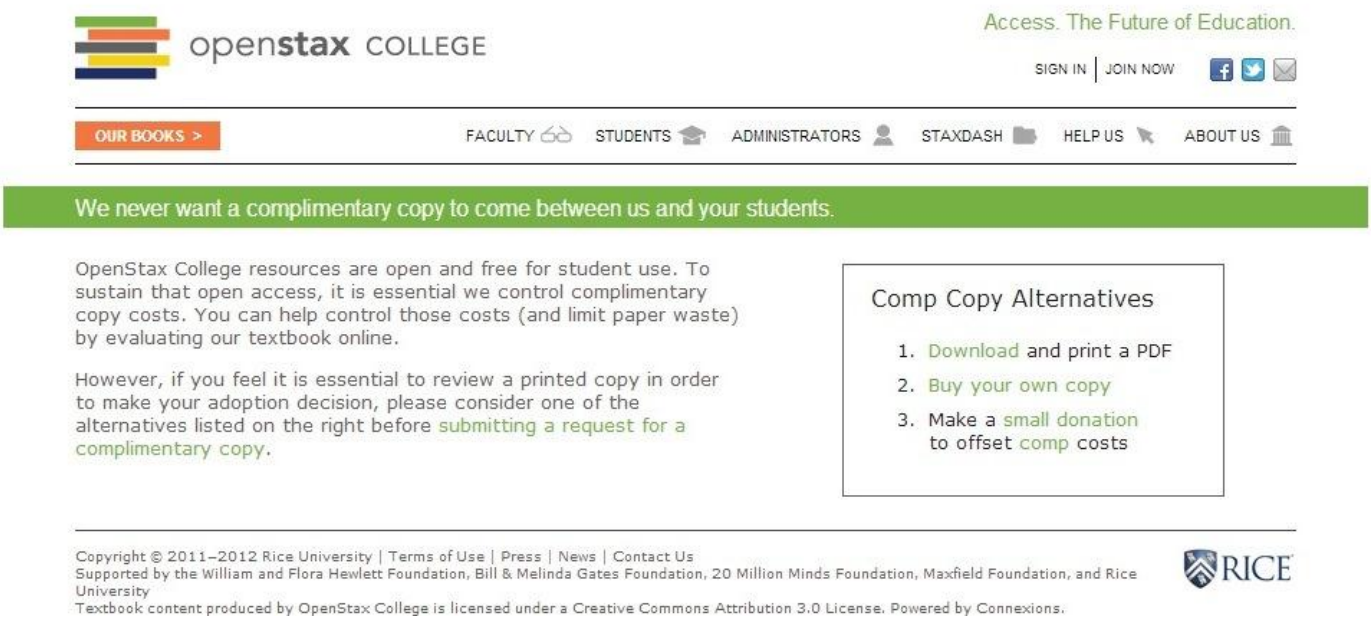
Modifications should be made to the donation dialog box, which presently appears before a user can access any version of the text. It seems logical that customers who pay for a version of the text will be less obliged and less willing to donate to OpenStax. Accordingly, the donation box pop-up should be removed for all forms of the textbook that are not free. The present free PDF download process has a problem where the donation box disappears as soon as the download begins, meaning customers see it for only five or so seconds. Before customers can download access a no-cost version of the book, they should have to intentionally opt out of donating to OpenStax. Donation revenue would likely increase if there were a suggested donation of five or ten dollars.

We also recommend that the purchase process be streamlined. At present, when starting from the home page, users must navigate through five to six different pages before actually acquiring the textbook. For example, during the purchase process, the following page appears after the user has previously indicated which textbook they are interested in:

This page is redundant and should be removed. Removing the superfluous donation box pages for the paid versions will also help this streamlining.

Improving the Faculty Interface

Before requesting a complimentary copy, professors are encouraged to choose one of three alternatives: download and print a PDF, buy their own copy, or make a small donation to offset comp costs.



We recommend that OpenStax instead offer a complimentary print and PDF copy to professors, without giving these alternatives. Asking professors to buy or donate for evaluation copies runs counter to their expectations of publishers, who are usually eager to give professors free copies. The current practice might turn potential customers away. We recommend keeping the current system of collecting professors' contact information before they can receive a complimentary copy. The sales representative can then follow up with the professor via email or an in-person visit.

Promotional Brochure

OpenStax can expedite the adoption of its textbooks by creating a promotional brochure that outlines the purpose of the organization and compares its textbooks to those of competitors. The high quality and low cost of the textbooks and the availability of supplementary materials should be key points in the brochure. Examples of well-known or prestigious schools who have adopted OpenStax books and testimonials by professors will make the brochure particularly persuasive, as will a prominent display of Rice University's logo. In our research we found that professors were particularly receptive to OpenStax's intent to relieve students of the burden of exorbitantly priced textbooks. For this reason, the brochure should also include facts on the severity of student debt in the United States and the potential OpenStax has to relieve some of this debt.

The purpose of the promotional brochures is twofold. Their primary benefit is to assist with sales of the textbooks. OpenStax's salesperson should use the brochure during personal meetings with physics instructors and, if necessary, can send the brochure and textbook to small schools in lieu of a sales visit. More generally, the brochure is a useful tool for expanding awareness of the OpenStax brand. Potential donors and those who are unfamiliar with OpenStax can quickly gain an understanding of the organization's mission and its potential to help students everywhere.

CONCLUSION

By implementing these recommendations, we are confident OpenStax can create sustainable revenue streams, increase the rate of its textbook adoptions, and expand awareness of the OpenStax brand in 2013.

- **Sustainable revenue streams**: By charging around $10 for each PDF download, OpenStax offers students unbeatable value and is ensured a stream of sustainable revenue to fund operations and future growth.

- **Increase rate of textbook adoption**: The $10 price of the PDF download will increase perceptions of quality, leading to increased adoptions, and the development of supplementary materials will make OpenStax's books more appealing to professors. Concurrently, a salesperson can promote OpenStax's mission and quality materials through face-to-face visits to the relatively untapped professor market in Houston and eventually all of Texas.

- **Expand awareness**: Minor changes to the cover of the textbooks and to the website will strengthen the OpenStax brand. Combined with the informational brochure, the work of the salesperson, and an increased rate of adoption, we believe brand awareness in Texas in 2013 will increase dramatically.

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Appendix A: Summary of Professor Feedback

Note: *This is a high-level summary of certain comments we received in formal and informal interviews with a diverse set of 23 professors and instructors that we came across during our Marketing project. The comments are meant to summarize various perceptions professors and instructors have regarding open-source textbooks and how they make textbook decisions. No comments should be construed as direct quotes.*

#	Professor/Instructor	Institution	Subject	Do you perceive a quality gap in open-source vs. traditional textbooks?	Limitations for open-source textbooks	Is textbook cost a consideration in making a selection?	How are textbook decisions made?	Do you use other teaching materials besides a formal textbook?
1	Gemunu Gunaratne	University of Houston	Physics	No	Lack of supplemental materials	No	Committee	Class notes
2	Rebecca Forrest	University of Houston	Physics	No	Lack of supplemental materials	Yes	Committee	*No answer*
3	Brandon Pope	Purdue University	Healthcare Engineering	Yes	Need to be paired with online lectures / interactive lessons.	Moderate	Self decision	Class notes
4	Melanie Hilburn	Lone Star College-Montgomery	Business	*No answer*	Difficult to use lectures/other materials in lieu of a textbook. Several students dropped out.	Yes	Not applicable	No
5	Andrew Johnson	Texas A&M University	Industrial and Systems Engineering	No	*No answer*	Graduate-Yes Undergraduate-No	-Previous Instructors -Undergraduate Corriculum -Graduate: Self decision	Academic articles
6	Hiram Moya	Texas A&M University	Industrial and Systems Engineering	Yes	Editing and royalties become an issue. Additionally, OER is often poorly edited or not checked for accuracy	Yes	Committee	*No answer*

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#	**Professor/Instructor**	**Institution**	**Subject**	**Do you perceive a quality gap in open-source vs. traditional textbooks?**	**Limitations for open-source textbooks**	**Is textbook cost a consideration in making a selection?**	**How are textbook decisions made?**	**Do you use other teaching materials besides a formal textbook?**
7	Don Pope	Abilene Christian University	Management	No	Improve marketing to professors. Also, offer supporting services such as testing materials, homework grading, vidoes, etc.	Yes	Self decision	Own notes and simulations
8	Brad Crisp	Abilene Christian University	Information Systems	*No answer*	*No answer*	Yes	Self decision	Class notes
9	Andy Little	Abilene Christian University	Business Law	No	*No answer*	Yes	Self decision	Class notes
10	Monty Lynn	Abilene Christian University	Management	*No answer*	Limitations for ancillary professor resources: test banks, questions & answer keys, etc.	Yes	Self decision	Articles, cases, and practice problems
11	Ryan Jessup	Abilene Christian University	Marketing	Yes	Viewed as self-published. A quality gap is perceived.	Yes	Self decision	Writes his own textbook.
12	Laura Phillips	Abilene Christian University	Management	Yes	Some OER books are good, some are bad. Difficulty is weeding out good from bad.	Moderate	Self decision	Uses a student-created textbook successfully.

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13	Mark Phillips	Abilene Christian University	Management	Yes (design only)	The content may be good, but the books are so ugly, they are undesirable to students.	Yes	Self decision	Class notes
14	Terry Pope	Abilene Christian University	Finance/ Economics	*No answer*	You need practice problems & solution sets to support a quantitative class (Finance).	Yes	Self decision	Practice problems, uses his own material
15	Kim Kimmey	Rice University	Communications	*No answer*	Some online content does not allow adaptability / customization ability (e.g. Xanadu prevents article splicing)	*No answer*	Content	Articles, psychological-based research
16	Ajay Kalra	Rice University	Data Analysis	*No answer*	*No answer*	Yes	Content, and other professors' opinions	Own notes
17	Scott Sonenshein	Rice University	Strategy	Possibly	If the OER textbook is free, it "must" be of lesser quality.	*No answer*	Reputation of author	Own notes, articles, simulations
18	Paul Padley	Rice University	Physics	Sometimes - he reviewed OpenStax Physics book and was satisfied	Need "clicker questions" or lecture aids to propel student participation.	Yes	*No answer*	Graphs and charts in his own Powerpoint lessons

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#	**Professor/Instructor**	**Institution**	**Subject**	**Do you perceive a quality gap in open-source vs. traditional textbooks?**	**Limitations for open-source textbooks**	**Is textbook cost a consideration in making a selection?**	**How are textbook decisions made?**	**Do you use other teaching materials besides a formal textbook?**
19	Karl Eckland	Rice University	Physics	*No answer*	Need turnkey solutions: testing & grading support services, etc.	Yes	He made his decision because the textbook was bundled with an online facility for students to submit homework assignments for auto-grading.	*No answer*
20	James Weston	Rice University	Corporate Finance	*No answer*	Online-only books are difficult to manage and navigate	Yes	Self decision	Own notes, case studies
21	Garen Markarien	Rice University	Financial Accounting	*No answer*	Online content is less convenient than a traditional textbook	No	Either based off the prior textbook in use, or other professor recommendations	Often writes his own textbook.
22	Mary Benson	Pensacola State College	Mathematics	*No answer*	*No answer*	Yes	Price and content	Math lab
23	Lois Dixon	Pensacola State College	Chemistry	Yes	Her experience is OER books with very little content - more suited for a middle school class than college	Moderate	Self decision: content and price	*No answer*