

# **Free, Online, and Tailor-Made: Creating an Open Textbook As a Model Document**

**Andy Spackman  
Brigham Young University**

## **Abstract**

The high cost of textbooks contributes to the financial burden of today's college students. Open textbooks are one solution, but in the absence of an administrative directive or institutional policy, faculty have little incentive to adopt open textbooks beyond an appreciation of their students' financial distress. Working from the grassroots and partnering with the library, the faculty of Brigham Young University's Management Communication program has created their own open textbook. Free, online, and tailor-made, this textbook can evolve in parallel with curriculum and models the writing and design principles taught in the course. The rationale and implementation of this project are discussed, as well as lessons learned about the realities of funding, creating, and assessing an open textbook.

## **Introduction**

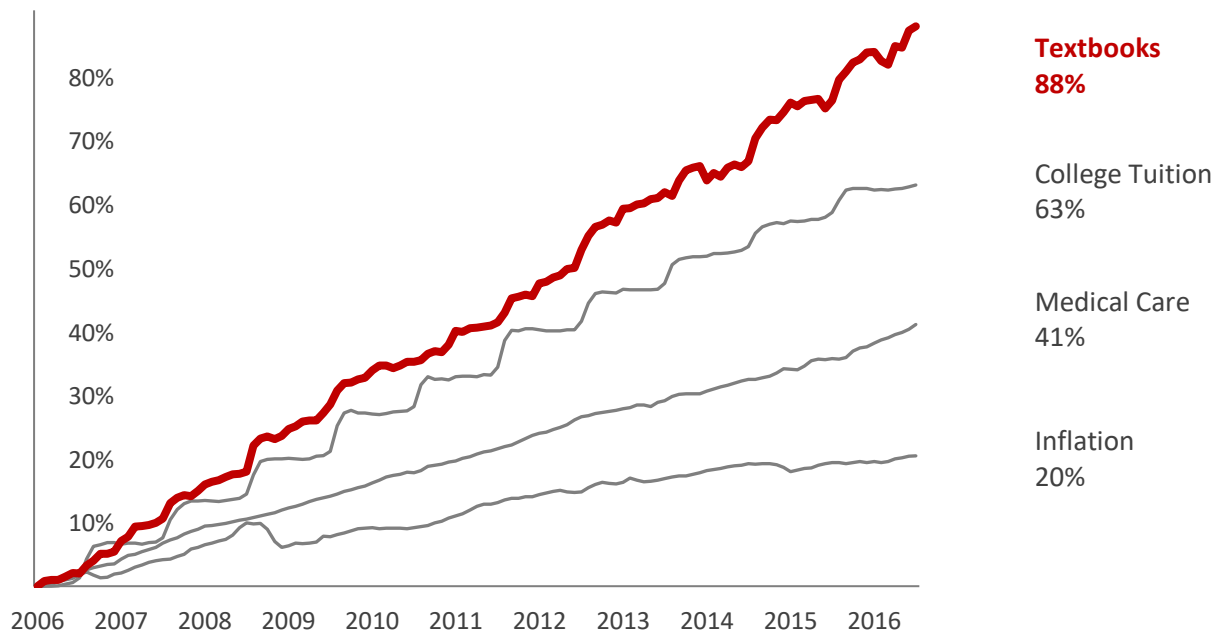
The ballooning cost of higher education is not a political debate for today's college students—it is a fact of life. According to the U.S. Bureau of Labor Statistics (2016), college fees and tuition have risen 63% since 2006. Even more astonishing, the cost of textbooks increased 88%, over four times the general rate of inflation, as seen in Figure 1. The College Board (2017) estimates the average undergraduate student will spend \$1,250 per year on books and supplies.

A survey of 676 juniors and seniors at Brigham Young University (BYU), a large private religious university located in Provo, Utah, suggests that high textbook costs have a detrimental impact on educational outcomes (Martin, Hilton, Wiley, & Fischer, 2016):

- 66% of respondents had chosen not to purchase a required textbook because of cost
- 47% of those not purchasing a textbook report that their grade suffered as a result
- 21% of respondents registered for fewer classes because of textbook costs, delaying graduation

This confirms findings from published studies, which have similarly shown that students often choose not to purchase textbooks because of cost, and that students who have to pay for textbooks register for fewer credits (Fischer, Hilton, Robinson, & Wiley, 2015; Florida Virtual Campus, 2012; Senack, 2014).

In surveys students express frustration at the high cost of textbooks, the perceived money grab of frequent editions, and the irrelevance of textbook content. As one student puts it: "It is simply frustrating to have to pay 400 dollars for a book that we have to have because of only a few assignments, and then when you go to do the assignments, you find out that you don't even have to have the book to complete it" (Martin et al., 2016, unpublished raw data).



*Figure 1. The rising cost of textbooks.*

Total percentage increase, from 2006 to 2016. Based on consumer price indexes from the U.S. Bureau of Labor Statistics.

Because textbooks add significantly to the cost of college attendance, free, open textbooks should be part of any solution. Open educational resources, such as open textbooks, “reside in the public domain or have been released under an intellectual property license that permits their free use and repurposing by others” (Hewlett Foundation, 2013). Open textbooks can be freely adopted and adapted by educators and cost students nothing.

Since open textbooks are a relatively new phenomenon, educators may have less awareness or understanding of them, and may have questions about their potential quality compared to traditional textbooks. However, as summarized by Hilton (2016), open educational resources have been shown to be equally effective as traditional textbooks in terms of student grades and course completion rates (see also Allen, Guzman-Alvarez, Molinaro, & Larsen, 2015; Bowen, Chingos, Lack, & Nygren, 2014; Feldstein et al., 2012; Fischer et al., 2015; Hilton, Gaudet, Clark, Robinson, & Wiley, 2013; Hilton & Laman, 2012; Lovett, Meyer, & Thille, 2008; Pawlyshyn, Braddlee, Casper, & Miller, 2013.)

### Objectives

Intended for broad dissemination, traditional textbooks often align only partially with a course’s curriculum, meaning students pay for material that may be irrelevant. Moreover, textbooks can quickly become dated, both in content and design, and the publication of iterative editions is beginning to seem like an inefficient model in today’s digital world.

A team of faculty at BYU’s Marriott School of Business is addressing these issues by creating an open textbook that is free, online, and tailor-made for their management communication students (see Figures 2 and 3; the *Management Communication* textbook is freely available at <http://mcom320.net/>).



Figure 2. Management communication textbook cover.

CONTENTS	
1	WHY? Be a Skilled Communicator
2	WRITE Look Good in Print
3	PLAN Think Before You Write
4	ORGANIZE Structure Matters
5	BUILD Create Clarity & Coherence
6	RESEARCH Find the Answers
7	FORMAT Make Your Message Inviting
8	REVISE Zoom Out – Zoom In
9	MANAGE Getting Things Done...With People
10	PERSUADE Be Convincing
11	SHOW Show What You Mean
12	PRESENT Stand & Deliver
13	BRAND Manage Your Personal Brand
14	WORK Get the Job

Figure 3. Management communication table of contents.

## Free

All students at BYU's Marriott School of Business are required to take the Management Communication (MCom) course, which is taught primarily by adjunct faculty. This course also fulfills the advanced writing portion of the university's general education requirements and has grown in popularity. For

example, 40% of those enrolled come from majors outside the business school. In a typical year, 80 sections are offered, and 1,700 students enroll. Although the textbook formerly used by the program was affordably priced at \$25, the size of the program means that moving to a free textbook will save students \$42,500 each year. Publishing it as an open textbook also allows it to be freely used and adapted beyond BYU.

## Online

Hosting a textbook online eliminates many of the logistics of publishing, printing, distributing, and iterating editions for a print textbook. An online textbook can be better integrated with multimedia and third-party resources, allowing students to experience current practices in business communication through blogs, articles, or TED Talks. An online textbook can also become dynamic, with rapid updates resulting in a living document that adapts to the evolving context of business communication and student needs.

For example, the “Show” chapter of the new *Management Communication* textbook (see Figures 4 and 5) reflects recent trends, such as the movement from skeuomorphic to flat design and the stripped-down approach to data visualization championed by thinkers like Cole Nussbaumer Knaflic (2015). It includes links to useful online applications like Canva (<https://www.canva.com/>), resources like The Noun Project (<https://thenounproject.com/>), and readings from scholarly, professional, and popular sources. It also directs students to exercises such as an interactive online tutorial for creating stripped-down, simplified tables and graphs in Google Docs. Such timely content can evolve with fashion or fluctuate with the vagaries of webhosting. An online textbook can be updated more quickly and easily than a print textbook, making it better able to prepare students for the world they will enter.

CONTENTS	
4	THREE DESIGN CONCEPTS
8	SLIDE DESIGN
10	TEN TEMPTATIONS & TECHNIQUES
17	DATA VISUALIZATION

LINK & LEARN			
Required Reading	Tips & Optional	Examples	Activity

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

This is Chapter 11

2

Figure 4. Table of contents for Chapter 11: Show.

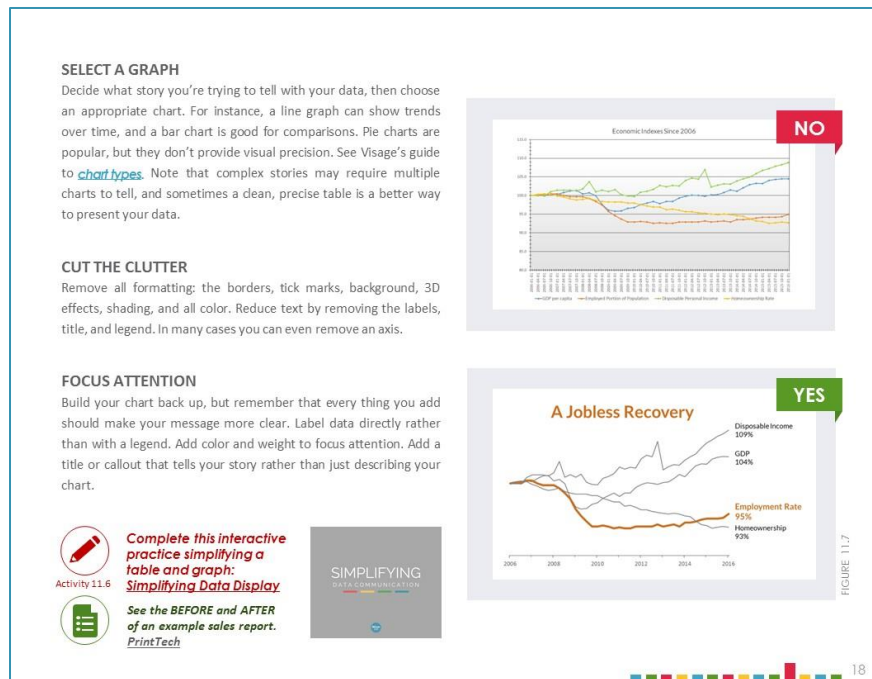


Figure 5. Sample page from Chapter 11: Show.

Although minor items like broken links may be fixed immediately, the MCom team plans a three-tiered approach to maintain and update the textbook:

1. Each semester links and examples will be checked.
2. Every year textbook content can be adjusted and resources updated.
3. Every three years overarching topics and design will be reviewed.

The textbook enlists end users in this effort, providing links in each chapter for recommending the inclusion of new resources or reporting errors, as seen in Figure 6.

## Tailor-made

Students in BYU's Management Communication course learn three things: to write, to speak, and to design. By writing their own textbook, BYU's faculty can tailor its content to mirror their curriculum and revise it to reflect the continuing evolution of that curriculum. For example, one of the textbook authors reviewed 268 student papers, coding the 1,876 grammar and style errors into 22 categories. Rather than attempt a comprehensive or abstract approach, the "Write" chapter of *Management Communication* is structured around these "22 fundamentals of good writing."

In another example, the "Brand" and "Work" chapters devote as much attention to LinkedIn as they do to traditional resumes, reflecting the shifting emphasis of many MCom instructors and including advice from alumni like the example in Figure 7. The "Brand" chapter links to a bank of LinkedIn profiles of recent alumni, categorized by major. Similarly, the "Work" chapter teaches students to use PAR (problem, action, result) stories in interviews and links to a collection of actual student examples. To fulfill general education requirements, the MCom curriculum includes a research paper assignment and training on library resources, and to support this the "Research" chapter goes beyond comparable textbooks in teaching principles of information literacy, as exemplified in Figure 8.



Figure 6. Additional resources for Chapter 11: Show.

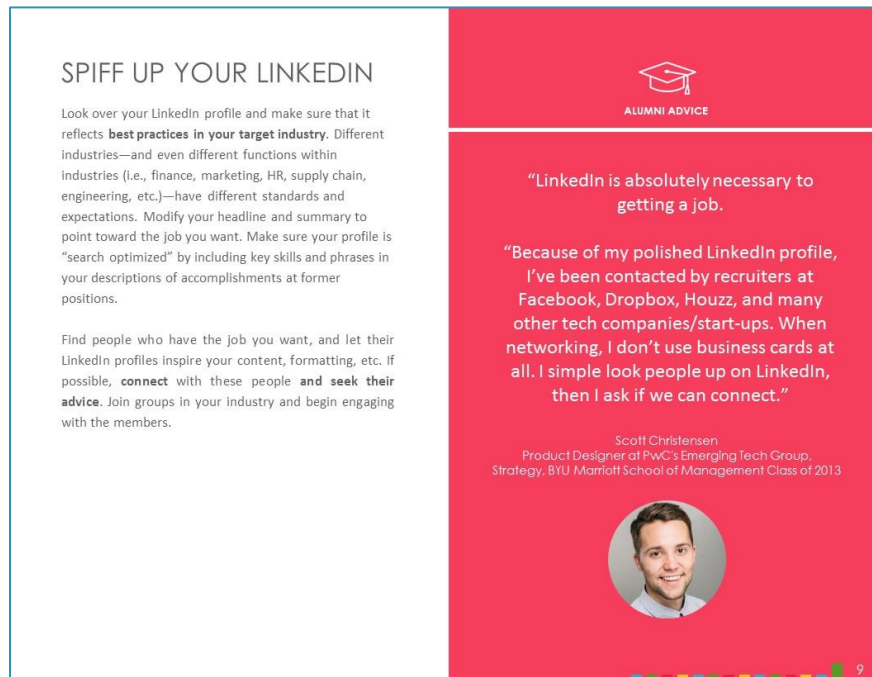


Figure 7. LinkedIn advice from Chapter 14: Work.

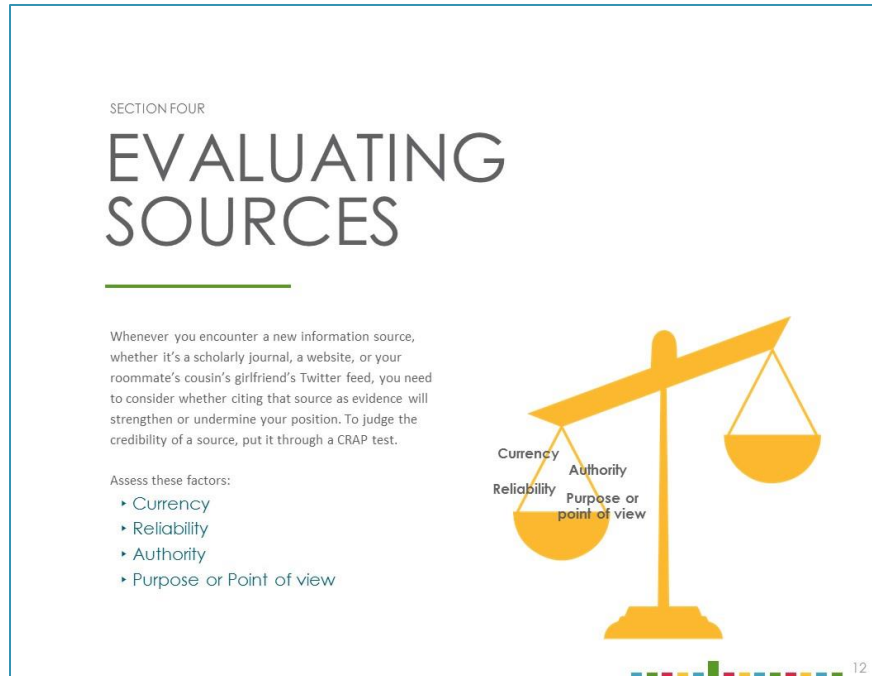


Figure 8. Sample page from Chapter 6: Research.

### A Model Document

The purpose of a traditional textbook is to summarize a discipline's accumulated knowledge. In contrast, the MCom team recognized an opportunity to demonstrate principles of effective communication through the writing and design of the textbook itself. In addition to creating a free, online, and tailor-made textbook, the MCom team set the further objective of creating a textbook that could serve as a model document.

Contemporary business writing is concise and clear, preferring simple, everyday language. It is visual, with images and graphical representations of data and concepts becoming central rather than peripheral elements. Effective business communication meets its audience's expectations and addresses their interests. These principles are central to the MCom curriculum, and to model them the team produced a textually concise, graphically rich, and audience-centric textbook.

The result is almost 300 pages of information, similar to any medium-length textbook, but the word count is no more than half of a comparable textbook. The writing holds to the contemporary, less formal side of the spectrum for business communication, as noted by a student in a pilot course section: "This textbook is awesome—wonderfully conversational, while remaining concise and clear. It almost felt like a friend was doing me a favor and giving me some pointers. I also loved all the colors and the fun quotes on the side. Seriously, a massive improvement."

*Management Communication* is formatted as a hybrid between a traditional document and a slide deck, what Nancy Duarte (2014) describes as a "slidedoc." The design aesthetic is clean, fresh, and consistent, every page containing an illustration or graphic to drive home key principles (see Figure 9).



Figure 9. Sample page from Chapter 14: Work.

## Implementation

Creating a textbook is a major undertaking. For the BYU team it sometimes felt like climbing a mountain, where each summit only revealed a higher peak beyond. Committed, flexible team members proved essential when timelines and budgets were stretched. A partnership with the campus library provided necessary resources.

### The Team and Timeline

MCom instructors were periodically surveyed about how well the textbook in use fit the needs of the course, and each semester discussions on the topic were held during instructor meetings. By 2016, after an evaluation of available textbooks, the program decided to create its own.

Kurt Sandholtz, the MCom Program Director, initiated and sponsored the project, with Lisa Thomas, the Assistant Director, working as managing editor. In the spring of 2016 they organized a team of six primary authors, drawn from among the MCom instructors and including themselves. Authors composed initial drafts using Google Docs, completing most chapters by the fall of 2016.

An important goal for the project was to establish buy-in by involving as many instructors as possible. This sense of ownership was accomplished by assigning each instructor two or more chapter drafts to review. In this way, the entire team of 20 MCom instructors has contributed, with each chapter benefiting from the insight of multiple instructors in addition to the primary author. Buy-in was reinforced by discussions and reviews of content and design during regular meetings and retreats. By requiring different skills and producing an “identifiable piece of work” with a “substantial impact,” involvement in the MCom textbook project has made the work of the adjunct faculty more meaningful (Hackman & Oldham, 1980, pp. 72-79).



To fully customize content to the curriculum, the MCom team had to write the textbook themselves. However, to mirror the principles taught in MCom, the textbook would need to be a well-designed, highly visual document. To accomplish this in a timely and unified manner the team retained the services of an external, professional designer (a BYU alumna). Through the winter of 2016-2017, the completed drafts of most chapters went through the design process, resulting in Keynote and PowerPoint files, with PDF versions published online. The team compiled and prepared chapters for piloting in several sections of MCom in the spring and summer of 2017, even while making final edits. The new textbook will be rolled out program-wide in September 2017.

### **Funding and the Library's Role**

Material incentives for writing a textbook traditionally include the prospects of royalty payments or credit towards tenure and promotion. However, neither of these incentives apply in the case of the MCom textbook. First, the decision to make the new textbook freely available precludes royalties. Second, with the exception of the Program Director, BYU's MCom instructors are adjunct faculty and gain nothing in terms of promotion or tenure.

Selected for their backgrounds in business and communications, MCom instructors have a passion for teaching and for the students of BYU. At the same time, the amount of work and level of expertise needed was too much to ask of them based on goodwill alone. To make the project possible and for the instructors to participate, a way to compensate them had to be found.

As students' costs have risen, interest in open educational resources has grown among educational institutions (see Wiley, Bliss, & McEwen, 2014). Academic libraries, which have long promoted open access, have participated in this groundswell. Although there is no administrative mandate to support open textbooks at BYU, the Harold B. Lee Library partnered with other university libraries in Utah to advance open educational resources and joined the Open Textbook Network (<https://open.umn.edu/opentextbooks/>). Seeing an opportunity to improve the financial wellbeing of students, the donors who comprise the Friends of the Library board have provided grants to support faculty who create open textbooks for their courses.

The MCom team applied for and was awarded one of these grants. This funding was soon matched by a commitment from the Marriott School of Business, and the University Librarian, Jennifer Paustenbaugh, provided a third source of funding. With these resources, instructors could be compensated for their work on the textbook. For example, in place of teaching a section of MCom, instructors could spend that time working on the textbook and still be paid as if they were teaching. These funds also provided for the professional designer.

### **A Living, Open Textbook**

The MCom Textbook is hosted at <http://mcom320.net/> as a single PDF file or as individual files for each chapter. As a dynamic, living document, the MCom textbook will require maintenance and support. Although relatively modest, these ongoing costs cannot be covered by the initial, one-time grant funding. Instructors can shoulder some of this burden, but to assist them, a part-time student employee, who is similar to a research assistant, will be hired.

The MCom program plans to take three approaches to covering this and other maintenance costs. First, program alumni will be solicited for support. Second, a link to a voluntary donation form will be included

in the textbook so that users can contribute. Third, supplementary materials used in teaching MCom at BYU will be made available to other institutions for a nominal fee. These materials may include lesson plans, activities, slide and document templates, and a test bank.

As an open textbook, *Management Communication* can be freely used and modified under a Creative Commons Attribution-ShareAlike license (<https://creativecommons.org/licenses/by-sa/4.0/>). It is tailor-made to match BYU's curriculum, but large portions are equally suited to other institutions' needs. To facilitate adoption, the textbook only links to external readings and resources that are freely accessible on the internet. Textbook chapters are available as separate files, which can be uploaded to any learning management system, although linking directly to the chapters on the *Management Communication* website ensures that students will read the latest version.

Those who lack the ability to create their own textbook do not have to select from existing traditional textbooks. The increasing numbers of open educational resources, like the *Management Communication* textbook, enable educators to compile course materials à la carte, providing their students a curated collection of free, course-relevant readings. This hybrid approach requires less of an investment while still providing current, customized content and easing students' cost of education.

### **Assessment**

At about the same time the textbook team began their work, the Faculty Center at BYU began a campus-wide study of factors for student success in course design, including curricular materials. This study includes detailed surveys of faculty and students over several years, along with quantitative data like course grades. The MCom team recognized an opportunity to use the same survey data for evaluation of the MCom program both before and after the adoption of the new textbook. The Faculty Center conducted initial rounds of the study in the fall and winter of 2016. The new *Management Communication* textbook will be adopted program-wide in fall 2017. It will be at least another year before meaningful comparisons of the study's survey data will be possible, but the team anticipates insights into the impact of the new textbook on student outcomes and input from students for further improvement of the textbook.

In the meantime, smaller, less formal surveys have already been conducted in course sections that piloted the textbook. This anecdotal evidence has been overwhelmingly positive, as typified by the following student responses:

"This new format is fan-freaking-tastic. It is easier to digest all of the content, and I feel much more appropriate for business style learning. I love the links included to articles and examples. The whole thing is much more interactive and will be useful."

"The new book format is a fresh change from the traditional textbook. The links, colors, spacing, and conciseness help the reader to recognize what is important with ease and help promote active learning."

"I love the new textbook content. I think it is much more engaging and easier to navigate."

Needless to say, students also appreciate not having to pay for this textbook.

## Lessons Learned

The experience of the MCom team in creating a free, online, and tailor-made textbook is undeniably specific to BYU's context, but lessons can be extrapolated for wider benefit.

Creating a textbook from scratch and tailoring it to the curriculum costs time and money. The MCom team expended significant effort and expense in the editing and design stages, creating a unified, coherent text and design. A different institution could avoid such costs by taking the à la carte approach previously described, where instructors collect and curate relevant materials from available open educational resources rather than create a new textbook. This "middle" approach can save time while still allowing for some customization, but it would not have resulted in the model document the MCom team desired.

In places, the *Management Communication* open textbook emulates this curatorial approach. Rather than reinvent the wheel, it links students to external readings, indicating whether they are required or supplemental. For example, the section on plagiarism in the "Research" chapter covers only a single page but directs students to an illustrative CNN story about public plagiarism gaffes and to a more rigorous introduction on the Harvard College Writing Program's website. This approach saves time and money. It also results in a more concise, less intimidating textbook, and a more active and varied reading experience, mirroring the way students consume information today.

The MCom team benefitted from funding that enabled authors to devote their effort and to pay for a professional designer. While this may not be possible in a different institutional context, it should be remembered that funding can come from unforeseen sources. The MCom team became aware of the BYU library's grant for creating open textbooks through a friendly lunch discussion between an MCom instructor and the University Librarian. To this point little thought had been given to making the new textbook an open textbook. A minor realignment allowed the team to secure this grant and to make *Management Communication* available for the benefit of others. Because the open educational resource movement has gained momentum worldwide, funding that is not readily apparent may be discoverable.

Additionally, while the scope of *Management Communication* required that primary contributors be compensated, this payment did not wholly reflect the time, effort, and expertise of these professionals (a common circumstance for adjunct faculty). Contributors were additionally motivated by their commitment to the project vision and to their students. If contributors to a similar project were regular faculty as opposed to adjuncts, the possibility of earning credit toward promotion or tenure might be another incentive.

The MCom team's experience also illustrates the importance of logistics. When working as a team the need for document version control cannot be overstated, although simple solutions such as shared Google Docs or Dropbox files can be adequate if carefully implemented. A brief checklist or flowchart can ensure team members follow established procedures. A shared project timeline or Gantt chart, regularly updated, is also essential. Whether working alone or as a team, authors should begin by resolving on project objectives and continuously use this vision as a decision-making filter to maintain unity in content and design and prevent scope creep.

Rather than look to other academic textbooks as models, *Management Communication* exemplifies contemporary business communication. The MCom team's guiding principle has been to prioritize the student perspective. Working with student interests in mind has led to a pragmatic focus on

professional applications rather than abstract principles. The desire to stay close to the audience also inspired the concise, accessible, and inviting style of the new textbook's writing and design.

### Conclusion

The faculty of BYU's Management Communication program chose to create their own textbook because they wanted a text that aligned closely with curriculum and modeled concise, graphically rich business communication. Additionally, they wanted it to be free for students and to publish it online, where it is easily distributed and regularly updated. To achieve this, they partnered with the campus library for funding, organized a team of authors, and hired a designer. The result is openly available for anyone to adopt or adapt, and the process has unified and strengthened the faculty. Most importantly, *Management Communication* was designed for students, and they have received it with enthusiasm.

### References

- Allen, G., Guzman-Alvarez, A., Molinaro, M., & Larsen, D. S. (2015). Assessing the impact and efficacy of the open-access ChemWiki textbook project. *Educause Learning Initiative Brief*. January 2015. Retrieved from <https://net.educause.edu/ir/library/pdf/elib1501.pdf>
- Bowen, W. G., Chingos, M. M., Lack, K. A., & Nygren, T. I. (2014). Interactive learning online at public universities: Evidence from a six-campus randomized trial. *Journal of Policy Analysis and Management*, 33(1), 94-111.
- Bureau of Labor Statistics. (2017). *Consumer price index*. Retrieved from <http://www.bls.gov/cpi/>
- Bureau of Labor Statistics. (2016, August 30). College tuition and fees increase 63 percent since January 2006. Retrieved from <https://www.bls.gov/opub/ted/2016/college-tuition-and-fees-increase-63-percent-since-january-2006.htm>
- College Board. (2017). Average estimated undergraduate budgets, 2016-17. Retrieved from <https://trends.collegeboard.org/college-pricing/figures-tables/average-estimated-undergraduate-budgets-2016-17>
- Duarte, N. (2014). *Slidedocs: Spread ideas with effective visual documents*. Duarte, Inc. Retrieved from <http://www.duarte.com/slidedocs/>
- Feldstein, A., Martin, M., Hudson, A., Warren, K., Hilton III, J., & Wiley, D. (2012). Open textbooks and increased student access and outcomes. *European Journal of Open, Distance and E-Learning*. Retrieved from <http://www.eurodl.org/index.php?p=archives&year=2012&halfyear=2&article=533>
- Fischer, L., Hilton III, J., Robinson, T. J., & Wiley, D. A. (2015). A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students. *Journal of Computing in Higher Education*, 27(3), 159-172.
- Florida Virtual Campus. (2012). *2012 Florida student textbook survey*. Tallahassee, FL. Retrieved from [http://www.openaccesstextbooks.org/pdf/2012\\_Florida\\_Student\\_Textbook\\_Survey.pdf](http://www.openaccesstextbooks.org/pdf/2012_Florida_Student_Textbook_Survey.pdf)
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hewlett Foundation. (2013). Open educational resources. Retrieved from <http://www.hewlett.org/strategy/open-educational-resources/>
- Hilton III, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational Technology Research and Development*, 64(4), 573-590.
- Hilton III, J. L., Gaudet, D., Clark, P., Robinson, J., & Wiley, D. (2013). The adoption of open educational resources by one community college math department. *The International Review of Research in Open and Distributed Learning*, 14(4), 37-50.

- Hilton III, J., & Laman, C. (2012). One college's use of an open psychology textbook. *Open Learning: The Journal of Open, Distance and e-Learning*, 27(3), 265-272.
- Knaflig, C. N. (2015). *Storytelling with data*. Hoboken, NJ: John Wiley & Sons.
- Lovett, M., Meyer, O. & Thille, C. (2008). JIME - The Open Learning Initiative: Measuring the effectiveness of the OLI statistics course in accelerating student learning. *Journal of Interactive Media in Education*, 2008(1), p. Art. 13. doi: <http://doi.org/10.5334/2008-14>
- Marriott School of Business. (2017). *Management Communication*. Provo, UT: Brigham Young University. Available at <http://mcom320.net/>
- Martin, M. T., Hilton III, J. L., Wiley, D. A., & Fischer, L. (2016). *Analysis of student and faculty perceptions of textbook costs*. Manuscript in preparation, Department of Instructional Psychology and Technology, Brigham Young University, Provo, Utah.
- Pawlyshyn, N., Braddlee, D., Casper, L., & Miller, H. (2013, November 4). Adopting OER: A case study of cross-institutional collaboration and innovation. Retrieved from <http://er.educause.edu/articles/2013/11/adopting-oer-a-case-study-of-crossinstitutional-collaboration-and-innovation>
- Senack, E. (2014). *Fixing the broken textbook market: How students respond to high textbook costs and demand alternatives*. Washington, DC: Student PIRGs. Retrieved from <http://www.uspirg.org/sites/pirg/files/reports/NATIONAL%20Fixing%20Broken%20Textbooks%20Report1.pdf>
- Wiley, D., Bliss, T. J., & McEwen, M. (2014). Open educational resources: A review of the literature. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 781-789). New York, NY: Springer.

**ANDY SPACKMAN** is Business and Communication Librarian at Brigham Young University, where he also teaches for the Marriott School of Business. His work centers on business information literacy, usability, and experiential learning. Contact him at [andyspackman@byu.edu](mailto:andyspackman@byu.edu).