Business and Open Education: Navigating OER in a Complex Information Environment

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Abstract:

Open educational resources (OERs) are teaching and learning materials that are free of cost and access barriers, and which also carry legal permission for open use.[1] OER enables faculty to replace costly textbooks and supplemental materials, if they so choose, which saves students significant costs of attending higher education while still providing a quality educational experience.

In this paper, the authors chronicle how they navigate the complex information environment of business education with a focus on open and affordable course materials. Business programs often have the largest enrollments on campuses, and so OER efforts in business can potentially have the biggest impact on campus OER goals.

Keywords: open educational resources (OER) | course affordability | business information | business education

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In this paper, the authors chronicle how they navigate the complex information environment of business education with a focus on open and affordable course materials. Business programs often have the largest enrollments on campuses, and so OER efforts in business can potentially have the biggest impact on campus OER goals.

However, there are special challenges of OER in business: the importance of commercial publishers who focus on corporate markets, not academic markets; and the wide use of diverse publishing formats, including case studies. Further, faculty perceptions and awareness of OER have also impacted the use of OER in teaching and learning. We discuss these factors as both challenges and opportunities.

One of us will confess to being a coauthor of a commercial textbook required for an undergraduate marketing class and will discuss how he later proposed open-access options instead. Another writer will present a case study on the collaboration between the library and

entrepreneurship faculty to revise curriculum materials for Fundamentals on Entrepreneurship, a core, high-enrollment, introductory course on entrepreneurship, using both proprietary business sources and OER. We conclude this paper with best practices for librarians to evaluate and promote OER resources that are relevant to the teaching and learning needs of their institution.

Literature review

Research indicates that awareness and use of OER is growing in higher education as both faculty and student satisfaction with traditional commercial and print textbooks decreases and the preference for digital materials increases. Business education is certainly affected by these trends. In the well-known 2014 survey by the Babson Survey Research Group (BSRG) (n = 2,144 faculty), 2.3% of Business faculty reported to be Very Aware of OER, 11.6% reported to be Aware, and 17.5% reported to be Somewhat Aware, the second lowest levels of disciplinary awareness following Social Sciences (Allen & Seaman, 2014, p. 35). In that same study, only 10% of Business faculty reported Regularly using OER, 21.1% reported Occasionally using it, 18% reported Rarely using it, and 50.9% reported Never using it or N/A (p. 37). Just two years later, in the 2015–2016 survey (n = 3,006 faculty), 8% of Business Administration faculty reported to be Very Aware of OER and 14% reported to be Aware, showing a 58.3% increase (Allen & Seaman, p. 52).

Slow but steadily growing awareness could be attributed to faculty dissatisfaction with the cost of textbooks and the high percentage of students who do not purchase them. In the 2017 survey (n = 2,711 faculty), Business faculty (6.8% of respondents) reported an average cost of $132 for their required textbooks, the third highest average price after Health and Related ($182) and Professional ($155) fields (Seaman & Seaman, 2017, p. 45). Of those Business faculty respondents, 31.9% stated that they were Satisfied with the cost of their selected textbooks, while just 12.8% were Very Satisfied, and only 28.3% reported that at least 90% of their students purchased the required textbook.

An established preference for digital materials could also be a factor. For the first time in four years of study by the BSRG, the 2018 survey (n = 3,288 faculty and 812 chairpersons) showed an overall preference for digital materials (Seaman & Seaman, 2018, p.41). Specifically, 39.6% of all respondents preferred digital to print, which was a 37% increase from the previous year's 28.9% (p. 23). This trend has continued, especially in business education. In the 2019 survey (n = 4,339 faculty and 1,431 chairpersons) Business Administration faculty reported the fourth highest disciplinary preference for digital at 36.5% (p. 41), and the 2022 survey (n = 1,843 faculty and 916 administrators) showed Business Administration as having the third highest preference for digital (tied with Economics) (p. 57). Despite the strong interest in digital materials, the 2020 survey (n = 4,339 faculty and 1,431 chairpersons) found that only 34% of Business Administration faculty at public institutions in 2018–2019 were aware of OER initiatives (Spilovoy et al., 2020, p. 33).

The strong preference for digital materials that are both affordable and regularly updated makes OER especially attractive to business faculty and students, but there are demonstrated, historical barriers to adoption. Using the Becher-Biglan typology, in which Business School disciplines are categorized as Applied Soft (along with Education, Modern Languages, and Health and Social Care), Coughlan and Perryman (2011) identify potential reasons that OER may be underrepresented in business education, including the practical requirements of studying in business and the existing informational landscape controlled in part by publishers who focus on corporate markets, not academic markets. The practical nature of business disciplines requires an "apply your knowledge" type of study where students are expected to gain skills to apply in the

workforce. There also is the aforementioned need for current and frequently updated information. Both of these factors contribute to the wide use of diverse publishing formats, including case studies and datasets (Tanaka et al., 2019). Finally, the assessment practices often used in business are traditional test methods such as exams with multiple choice that rely on test banks, online homework, and other ancillary materials (Coughlan & Perryman, 2011, p. 18). In summary, the need for practical and current information paired with the reliance on ancillary materials (often made readily available by commercial textbook publishers) may make the transition to OER more difficult in business.

Furthermore, there are barriers that are applicable across all disciplines. Some of the challenges included in the literature reviewed for this paper were the limited number of OER in area of study (high-enrollment courses have the highest representation), lack of awareness and/or confusion over which digital materials could be considered OER, lack of time and effort to locate or create OER materials, lack of understanding of copyright and open licensing, lack of recognition in tenure and promotion related to OER creation, the perception of quality or prestige of OER, and the importance of citation counts and various research impact factors, particularly for OA journals (Barneva et al., 2019; Everard & Pierre, 2014; Farrow, 2017; Fine & Read, 2020; Hahn & Wyatt, 2014; Issa et al., 2020; Kotsopoulos, 2022; Lyons & Booth, 2011; McDowell, 2010; Pavlidou et al., 2021; Seaman & Seaman, 2022; Terrasse et al., 2012; Torres & Manjarrez-Dominguez, 2021; Wang & Wang, 2017).

These barriers and challenges indicate the need for discipline-based OER development (Fadel, 2021, p. 252; Wang & Wang, 2017). Literature on business and open education, specifically the use of OER and OA journals and other publications as required course materials, discusses outreach through subject or liaison librarian programs (Bell & Johnson, 2019, p. 318; Doan, 2017, p. 668; Kimball et al., 2022) or faculty user research by college or school (Bell & Johnson, 2019, p. 319; Hahn & Wyatt, 2014; Humbert et al., 2008). Business faculty and educational technology scholars have also studied student attitudes towards and perceptions of OER (Barneva et al., 2019; Everard & Pierre, 2014; Fine & Read, 2020; Issa et al., 2020; Kotsopoulos, 2022; McDowell, 2010; Pavlidou et al., 2021), and librarians have reported working with business faculty to create and/or discover OER, through government-funded or top-down, campuswide initiatives (Barneva et al., 2019; Doan, 2017). Some of the literature also focuses on evaluation of OER, OA, and other affordable or freely available learning materials for business disciplines (Berkman, 2019; Kotsopoulos, 2022).

One Experience with Coauthoring a Commercial Textbook for a Business Class
It is not uncommon for librarians to demonize commercial publishers of textbooks. The motivations of authors of commercial textbooks are less often considered by librarians advocating for OER. Here is one story of how a professor of international marketing and an embedded business librarian became authors of a commercial textbook and how the class that used this textbook eventually adopted an open strategy.

The international marketing class at the author's university is required for all marketing majors. The focus of the class is a research-intensive, experiential learning, export promotions team project. Each student team attempts to make an international sale to a new country market for a small- to medium-sized manufacturer from our state. This project had some renown across the state, received periodic media attention, and won a couple of awards, much to the pleasure of the professor, who considered the project his baby (rightfully so).

For many years, the professor and the librarian cowrote a manual for this project. The students bought the manual from the campus bookstore as a paper coursepack for $12. In 2017, commercial textbook publisher Kendall-Hunt invited the professor and librarian to create an e-

book version of this manual. Kendall-Hunt often encourages faculty to create a textbook for the classes they teach, with an option for other classes on other campuses to also adopt the e-book. The marketing professor was excited to receive the invitation, and he and the librarian accepted the invitation.

The e-textbook would cost $50, a low price for a business textbook. The students in the class would be expected to purchase it. The two authors would each receive 10% of the sales as royalties. If sales exceeded 250 copies a year, they would each receive 20%. Royalty checks would be mailed out each summer.

What the authors did not know (and failed to ask about) was the digital rights management (DRM) for this e-textbook. While the old $12 coursepack could of course be kept by a student and used after graduation in a marketing career, the e-textbook was hosted on a proprietary platform that limited access to four months. When the semester ended, the students lost access to the text forever. So the e-textbook was really a rental.

The authors also didn't ask about future price increases. In 2022, the list price of the e-textbook is $126, not including the retail markup if purchased through the campus bookstore. This of course is a very large percentage increase.

By 2020, the professor who created this project retired. The embedded librarian began working with the international marketing professor hired to teach this class. The new professor began using instructional technology, including Canvas and Panopto, for video recordings of class sessions on how to do the big project. The new professor and the librarian also began to simplify the project, resulting in more focused research needs by the student teams.

With these pedagogical changes, the librarian recommended that the e-textbook no longer be required. Now the students are introduced to the e-textbook as an option but are warned of the DRM restrictions. Instead, the librarian uploads manuscript versions of some of the key chapters to Canvas as resources for the students. In the last few semesters, no students have purchased the e-textbook.

The Challenge of Business Case Studies

Case studies are a staple of business education pedagogy (Ellet, 2007). While the use of cases is most associated with the Harvard MBA program, cases are a common format in business school. A case is usually a story of a problem, based on a real situation. Students discuss the story and make recommendations on what should happen next. Usually there is no need for further research. Often a case includes teaching notes for the professor. In a sense, case studies are an alternative to a textbook.

Case studies seem to be a lucrative format for Harvard Business Publishing (HBP). If you Google "case studies," the first hit will be a paid link for the Harvard cases—meaning, HBP bought "case studies"as a Google AdWord. More evidence: the licensing of the HBP case studies limits shared access and therefore boosts sales. Professors and libraries are not allowed to share a single copy of a Harvard case in PDF format through a classroom management system or electronic reserves. A student is not allowed to share a PDF case with their team. Instead, a professor can get a discount for course adoptions. Meanwhile, a library cannot license a package of Harvard cases. Nor can cases (PDF or print format) be interlibrary-loaned. Finally, aggregators like ProQuest and EBSCO have not been able to license the full text of Harvard cases for their databases.

The OER movement is impacting options for case studies. Sage has a business cases database that libraries can subscribe to or purchase. The Journal of Business Cases and Applications is a new open-access journal. Other OA journals include case studies as a common content type. The MIT Sloan School of Management provides open-access cases written by its faculty. The

aggregators are finding more cases to license. While HBP remains the most famous source of case studies, the rise of these open or subscription alternatives is a promising trend.

One Experience with Aligning OER with Business Pedagogy
As presented in the literature review, business information is a skill-based, apply-your-knowledge subject matter that is constantly updating. Thus, the business curriculum is likely to be reviewed and revised to meet the current demands of the field. Here is another story of how a professor of entrepreneurship and a business librarian revised a course's curriculum and how they replaced costly course materials by integrating OER and other affordable business information sources.

The course, Fundamentals of Entrepreneurship, is a core, high-enrollment course required for all business majors. Prior to the curricular revision, the course used a commercial textbook and a handful of pay-per-use case studies as the assigned course materials. The course made use of "traditional assignments" such as multiple-choice quizzes, a mid-term, and final. Use of library subscription resources for business was also strongly encouraged. In 2019, the professor wanted to shift from "traditional" pedagogical approaches to integrate experiential learning as well as make use of more affordable course materials. Due to the professor's and librarian's existing relationship (collaborating on business information literacy sessions) and the recent launch of the library's Open and Affordable Textbook Initiative (OATI), the professor reached out to the librarian for the opportunity to collaborate on this effort.

Using Abbey Elder's three-step strategy for finding and evaluating OER, the professor and librarian created a shared document with the main course topics, then began adding potential resources under each topic. The goal was to find high-quality resources that were no cost or low cost for students, relevant to the subject matter, and updated fairly frequently to reduce the need to replace the course material too often. The end result was a variety of types of resources in terms of "openness" that met the course learning objectives. The final curated list included OER (no cost to students and openly licensed), online resources (no cost to students but not necessarily openly licensed), and library resources such as e-books, business articles, and business databases (proprietary but no cost to students) to replace the existing course materials.

Three-Step Strategy to Find and Evaluate OER

Step 1: Identify	Identify keywords in the subject area related to the Course/program.
Step 2: Compile	Search OER repositories and compile a list of possible Resources.
Step 3: Evaluate	Review the OER to determine if it aligns with the course learning goals.

Adapted from Elder's How to Find and Evaluate OER video (2017).

Further, ten skill development exercises were developed by the faculty and librarian to replace the cost-per-use case studies. Similar to the case study format, the skill development exercises presented students with a scenario and asked them to provide a solution to the problem by applying the concepts they have learned so far in the course. The exercises focused on topics such as feasibility analysis, value proposition, and financial analysis as well as directed students to use the recommended resources that were preselected by the faculty and librarian as the most

useful to complete the particular assignment. In general, students were receptive to the new course materials, they enjoyed the variety of resources, and were appreciative that it was no cost to them.

While OER is ideally situated to support business pedagogical approaches, there is still work needed to build a more robust collection (e.g., ancillary business materials). Yet, in collaborating with faculty, librarians can provide support in navigating the various business information resources to provide high-quality course materials that meet the course learning outcomes and increase course affordability.

Recommendations for Navigating OER in the Business Information Environment

Based on the literature review and our experiences with OER efforts for business classes, the authors present the following recommendations:

- Proactively engage with your stakeholders and actively listen to their needs.
- Align OER into your institution's existing strategic initiatives, such as diversity, equity, inclusion, and access (DEIA) initiatives (e.g., programs for BIPOC and first-generation students), to broaden your reach.
- While fully "open" is usually our target, "affordable" is also a worthy goal. Promoting flexibility in OER might lead to more successes with faculty than a more fundamentalist posture.
- Don't forget about the needs of busy business faculty for textbook ancillary tools (quizzes, slides, teacher notes, etc.), especially for large introductory courses. There is still work needed to create a more robust business OER collection.
- Be aware of how long it can take to adopt or create OER for a class.
- Suggest and leverage your existing business database subscriptions. While proprietary, they are free to students!

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