
**Open Educational Resources: Opportunities, Issues and Challenges
From a Florida Perspective**

Devika Ramsingh

Librarian
Valencia College, Florida, USA

Abstract

Openness has become a key feature in the discourse and practice of higher education in recent years, mainly due to technological advancements, which have facilitated innovation in teaching and learning practices. Open Educational Resources (OER) often refer to available resources at little or no cost for learning, teaching or research. The United States (US) Legislatures' thrust for educational institutions to be student-centred and accessible has shifted the way learning occurs. The learning process is now poised to be more collaborative, inclusive and open. These advancements have set the stage for open and distance learning by enabling the publishing and accessibility of educationally focused, digital content, while the introduction of open licensing created new ways of developing and delivering teaching materials.

Educational institutions are now encouraged to provide accessible and affordable resources for students to complete their education in person and via distance learning successfully. This is becoming more of a challenge with the steady increase in the cost of acquiring an education. One factor which contributes to this is the cost of textbooks. According to the United States General Accountability Office (2005), the cost of textbooks tripled between 1998 and 2004, while the results of the 2013 study showed that textbook costs rose 82 percent between 2002 and 2012 (United States General Accountability Office, 2013). The issue of the rising costs of textbooks in the US is very relevant to the Caribbean since many of the textbooks used at Caribbean institutions are produced or sourced from US-based publishers or distributors.

The high costs of academic textbooks and fees to attend college, in general, can be viewed as one of the pivotal stimuli behind the OER impetus among colleges and universities in the US. Even though the OER Concept has been in existence for many years, with one of the longest-running OER initiatives commencing in 2002, the adoption of OER has been marginal. According to a study conducted by the Babson Survey Research Group, only 5.3 % of courses nationwide used open textbooks between 2015 and 2016 (Seaman and Seaman, 2017).

This paper will explore the opportunities, issues and challenges associated with the adoption of OER at US colleges and the librarian's role in the process. It is anticipated that this paper will show how librarians can assist faculty in overcoming some of the challenges associated with the adoption of OER.

Keywords: colleges; electronic textbooks; libraries; Open Educational Resources (OERs); open-source technology; shared resources and services; textbook costs.

Introduction

The increasing costs of academic textbooks can be viewed as one of the primary stimuli behind the Open Education Resources (OER) initiative at colleges and universities worldwide. While on a macro scale, the potential cost savings for students are being recognized by politicians in the United States of America (USA), as according to the Scholarly Publishing and Academic Resources Coalition (SPARC), over 70 bills related to OER were filed in 28 states in 2017, with successful enactments in Texas, Colorado, Maryland, Washington, and New York during the 2017 legislative sessions (Steen, 2017).

Florida State has also recognized the financial burden that students bear in relation to textbooks and course materials, and through legislature has sought to alleviate this challenge. As stated in the 2017 Florida Statutes (2018), Florida College Systems, institutions and state universities are to adopt policies that ensure affordability of textbooks and instructional materials. One of the stipulated measures mentioned for consideration to ensure affordability is to expand the use of open-access textbooks and instructional materials (The Florida Legislature, 2018).

The effects of the rising cost of textbooks on students over the last six years are evidenced by the data from numerous surveys that highlight the coping mechanisms used by students to avoid the costs of purchasing new textbooks. This paper will heavily focus on the findings of two research papers conducted in Florida by Seaman and Seaman (2017) and the Florida Virtual Campus Office of Distance Learning and Student Services (2016).

Access to educational resources should be a fundamental right of all students. This access is often limited or restricted, mainly due to cost. One of the biggest challenges facing higher education today is the affordability and accessibility of textbooks. In recent years, the cost of acquiring education has steadily increased, with one contributing factor being the rising cost of textbooks. According to a report by the United States General Accountability Office (2005), the cost of college textbooks tripled between 1998 and 2004 and continues to increase at an average rate of 6% per year. The rising costs of textbooks in the USA is very relevant to the Caribbean since many of these are used at Caribbean institutions and are published in the USA. Further compounding this issue is the fluctuating US exchange rate in some Caribbean territories and the shortage of US currency.

OERs are teaching, learning, and research resources that are available and can be reused, revised, remixed, redistributed, and retained. They can take various formats ranging from images, entire courses to syllabi, assignments to entire textbooks. OER is defined as “teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others” (Atkins, Brown, & Hammond, 2007, p. 4).

The Florida Student Textbook and Course Materials Survey conducted by the Florida Virtual Campus Office of Distance Learning and Student Services (2016) surveyed 40 public colleges and universities in Florida and revealed the impact of the financial burden of purchasing textbooks and course materials for students. The study showed no significant changes to the financial impact on students between the 2012 and the 2016 survey.

According to the above-mentioned survey, more than half of the students who responded (53.2%) spent over US\$300 on textbooks alone for the 2016 spring semester, and 17.9% spent more than US\$500 within the same period. The need for course materials is an additional cost to students, with 77.2% stating that they spent US\$200 or less, and 10.6% spent US\$300 or more on these required materials (Florida Virtual Campus, 2016).

Overall, college students spend more on textbooks and course materials than university students. The findings from the study revealed that 56.3% of college students spent more than US\$300 on textbooks, and 12% spent that much on course materials as compared to 50.5% on textbooks and 9.8% on course materials by university students. There was also a significant increase in the number of textbooks purchased that were not used during the academic career of the respondents, from 1.6 textbooks in 2012 to 2.6 textbooks in 2016 (Florida Virtual Campus, 2016).

Many college and university libraries in the USA no longer or are hesitant to purchase print textbooks due to increasing budget cuts, the high prices of textbooks, and the ease with which these textbooks become obsolete with newer editions. Despite being a contentious issue for many years, academic libraries cannot sustain a print textbook collection on their budgets. However, with the costs of textbooks on a never-ending rise, demand for access to textbooks remains high among students. A review of several academic libraries’ collection policies will reveal that academic libraries in the USA have explicitly excluded textbooks from library

purchases. Instead, academic libraries now depend on the teaching faculty to provide copies of their textbook and course materials which are placed on reserve. Boston College, for example, states on the Library's FAQ page, "BC Libraries do not have a policy of acquiring all textbooks for all classes. However, some professors see to it that we acquire the textbooks for their classes, and some professors have their textbooks put on reserve." (Boston College Libraries, 2017). Even though this provides textbook access to students, there are limited copies available in the reserve collection, and these have restricted loan policies. It must be noted that not all faculty place their textbooks or course materials on reserve.

To cope with these challenges, students are developing strategies to overcome the obstacle of increasing textbook costs. A survey of 22,557 Florida college students revealed that 66.6% did not purchase the required textbook, and 45.5% did not register for a specific course due to financial constraints (Florida Virtual Campus, 2016). These strategies continue to negatively affect students as 19.8% of students reported failing the course because they could not afford to purchase the text, while 26.1% dropped the course and 20.7% withdrew from the course (Florida Virtual Campus, 2016).

Another coping mechanism employed by students is to take fewer courses. According to the survey, 47.6% of the respondents said they enrolled in fewer courses since they could not afford the costs associated with additional textbooks and course materials (Florida Virtual Campus, 2016). The result of such action is a delay in their graduation dates because students would have to register for additional semesters to make up the credits needed to graduate. This further impacts overall college costs through what economists call opportunity costs - the earnings a student foregoes every year that she or he is not employed in the workforce (Sullivan, 2010). This was also supported by Poppick (2015), who indicated that the average annual salary of a new college graduate being US\$50,556, every additional semester a student spends in college becomes a costly endeavour delaying their entry into the workforce. Furthermore, extending graduation time is personally daunting, as the literature suggests a negative correlation between the length of time a student takes to complete a degree and attaining the qualification (Hayward & Willett, 2014).

Other strategies employed by students included renting, sharing with classmates and purchasing used textbooks, all of which have their limitations. The most common impediment to

renting a textbook is that the student will no longer have access to the text at the end of the semester. If there is an upcoming exam or assignment, the use of the book will have to be scheduled to ensure that it is rotated and accessible. This may result in one student having the book available too close to the exam or assignment due date. Purchasing a used text may result in the student using an older edition.

Financial aid coverage for textbooks is decreasing, as the findings revealed that for the spring 2016 term. 70.7% of students reported that they received financial aid, of which nearly one-third (29.2%) indicated that their financial aid did not cover any of their textbook costs (Florida Virtual Campus, 2016). These affordability issues are expected to continue, but the use of OER can alleviate these issues. According to Woodward (2017), “adoption of OER to ensure student access to course materials can be seen as a starting point on the path to student success” (p. 207).

The concept of open access in education is not new, and the longest-running OER initiative is the OpenCourseWare (OCW) project from MIT, which commenced in 2002. OCW has been described by Abelson (2008) as “a visionary commitment by the Institute to publish the materials from all MIT undergraduate and graduate subjects freely and openly on the Web for permanent worldwide use” (p. 164). Another initiative is the Community College Consortium for Open Educational Resources (CCCOER), which is part of the Global Open Education Consortium founded in 2007 and has grown to include colleges in 27 US states. This initiative celebrates 11 years of promoting awareness and guidance to adopting open educational resources (CCCOER, 2018). Despite the efforts to encourage the adoption of OER, the statistics for adoption have been minimal as according to Seaman and Seaman (2017), only 5.3% of courses in the US used open- textbooks between 2015 -2016.

Adoption rates are increasing as institutions are recognizing the value that OER can bring to their institutions and the potential cost savings for their students. The increase in adoption rates among tertiary institutions is evidenced by the findings of the 2017 National Higher Education Report conducted by the Babson Survey Research Group (Seaman and Seaman, 2017). According to this report, the adoption rate of open-licensed textbooks rose to 9% in 2016-2017 from 5% in 2015-2016. The report also revealed a growing increase in awareness of both Creative Commons (CC) licensing and OER (Seaman and Seaman, 2017).

Opportunities for OERs

The thrust by legislatures and the Board of Governors for the State University System of Florida through their 2025 Strategic Plan for Online Education emphasizes the need to restructure the education system (State University System, 2015). This restructured education system would focus on quality, access, and affordability. Under the section of affordability in the 2025 Strategic Plan, the second stated goal is to “reduce the cost of education materials for students” through the development of “a statewide model for the use of eTextbooks and other open educational resources to reduce costs for students in Florida” (State University System, 2015, p. 13). The Strategic Plan encourages educational institutions to be student-centred and further propels the need for accessible and affordable resources for students to complete their education successfully. The use of OER is a strategy proposed to achieve reduced costs for students, increased accessibility and equity among the student population.

Access to the required resources on the first day of class is accepted as critical for student success. Through OER initiatives, faculty members will have the opportunity to develop course materials around their classes rather than the other way around. In so doing, it provides an opportunity for them to innovate and create rather than try to fit into the structure of a static published textbook or resource. The modular nature of OER allows instructors to customize their textbook, making it more applicable to their courses. They are able to select and highlight areas that are relevant to their syllabi so that the materials relate to specific topics (Adamich, 2011). This ability to customize will allow more meaningful and inclusive pedagogical practices and enhance learning outcomes through greater flexibility.

In terms of accessibility and affordability of education, OER can be used as a method to increase access by reducing the costs associated with purchasing textbooks and course materials. Students will have access to all course materials from the first day of class. They will not be faced with the conundrum to decide whether to take fewer classes or not purchase the text in an attempt to deal with the rising costs. According to OpenStax (2018) at Rice University, by using OER, institutions can save students millions on education. Its impact website reports that students saved \$155 million since 2012. This means fewer barriers to student success, as the cost

savings accrued will benefit them and will likely result in higher course enrollment and completion rates.

OER also provides the opportunity to make education more convenient since these resources are digital and can be accessed in mobile-friendly formats anywhere. OER facilitates lifelong learning because these resources can be accessed even after students complete their classes.

The future of OER looks promising as according to the 2017 Report on Educational Resources in Higher Education, 37% of faculty members who do not currently use OER stated that they would consider using OER in the future, while 7% said they would definitely use OER in the future (Seaman and Seaman, 2017). The report showed a gradual increase in willingness to adopt and consider OER projects.

Issues

The major issue with OER's use and adoption is copyright and licensing. When selecting an OER, an important aspect is the licensing status of such materials. An open resource does not imply that it is entirely free and not bound by copyright. This type of resource is likely to align more with being open with permissions. Attention should be focused on the type of copyright assigned to an OER by its developer or publisher. The onus is on the user of the OER to adhere to these stipulations.

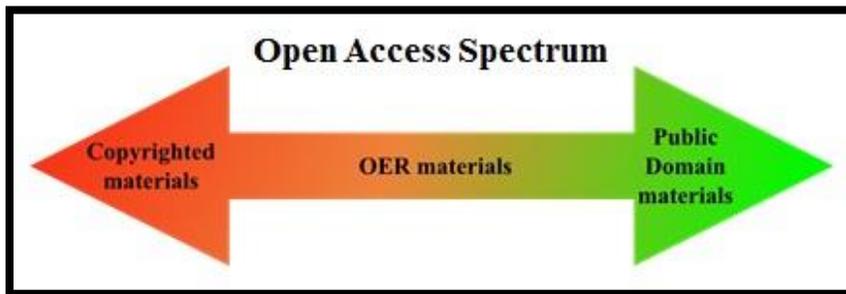
When considering open resources for inclusion in course material packages, faculty should be concerned about who owns the rights to use, distribute, modify, or reuse materials. Many faculty members are familiar with the legal mechanism of copyright which is at one end of the open-access spectrum. Still, they may not be familiar with the rights surrounding the use of OER materials as nearly one-quarter of all faculty report that permissions to use and change the resources are potential barriers to the adoption (Seaman and Seaman, 2017).

On the other end of the open-access spectrum, as illustrated below, exists the public domain, which is a designation for materials that are not protected by any copyright law or other restriction, and may be freely copied, shared, altered, and used by anyone. In the middle of this spectrum are OER materials which have flexible copyright licenses under the CC licenses. These

licenses grant some rights to the public to use, share and modify materials while allowing creators to retain the copyright to these materials.

Figure 1

Open Access Spectrum



Note. Adapted by the author

Even though the ability to reuse and remix content is central to the concept of OER, not all materials licensed under CC are OER compliant as these licenses provide varying amounts of protection ranging from “all rights reserved” (full copyright) to “no rights reserved” (public domain). These various levels of the CC licenses require a demystification of the licensure associated with CC licenses to highlight how it enables educational resources to be open. This needs to be clarified for faculty. Seaman and Seaman (2017) revealed that most faculty continued to report a high degree of awareness of copyright as it relates to their class content, with 84% being either very aware or aware. Awareness of the public domain was also very high, with over 90% of respondents reporting some degree of awareness. However, the level of awareness of CC was somewhat lower, with less than one-half of faculty being either very aware (19%) or aware (28%).

OER awareness is another challenge to adopting OER, as faculty are often unaware of the existence of OER, its uses, and benefits. The level of awareness has changed over the years, but even though faculty are becoming more aware of OER and its benefits, adoption levels are still incremental. When asked about their level of awareness of OERs, most faculty members (56%) said that they were generally unaware of it or had heard about OER, but they did not know much about them. Faculty comments confirmed these results, and some showed excitement or desire to

learn more. Only 10% reported that they were very aware, while 20% said that they were aware, while an additional 15% of faculty reported that they were only somewhat aware (Seaman and Seaman, 2017).

The level of combined awareness of OER and CC licenses associated with the use of OER have increased each year, as the 2016-17 results reinforce the trend of increased awareness of OER observed in the last two surveys. Faculty claiming to be very aware doubled from 5% in 2014-15 to 10% in the most recent year. Those indicating awareness grew from 15% to 20%, and those that were somewhat aware from 14% to 15%. The percent of faculty reporting no awareness dropped from nearly two-thirds (66%) in 2014-15 to 56% this year (Seaman and Seaman, 2017). Even though there is increasing awareness, the numbers remain very low.

Awareness levels have been increasing for all three legal permissions, despite the low awareness rates. The faculty (84%) who reported that they were very aware of copyright was a small increase over the 80% reported in 2016 and the 78% in 2015. Awareness of public domain increased very slightly, with very aware or aware totals growing from 69% in 2017 compared to 67% in 2016 and 68% in 2015. Awareness levels of CC have increased the most, with the number of faculty reporting that they were very aware or aware now at 47%, up from 38% in 2016 and 36% in 2015 (Seaman and Seaman, 2017). This suggests that faculty are becoming more aware of OERs, its benefits and CC licenses and their use. Despite the minimal increases in awareness, it is a positive sign for OER.

Quality is another issue to consider when adopting OER since the word free is often associated with a perception of low quality. OER may be produced with little support for copy-editing and design and may not be updated as frequently. Some OER repositories allow users to create accounts and post materials, some of which may not be relevant or totally accurate. It is important for instructors to carefully evaluate resources before including them in the course material packages. Some repositories are now using a review process to deal with the issues of quality control to avoid skepticism. One such project is the Open Textbook Library by the University of Minnesota, which allows educators to review open textbooks using a pre-determined rubric that lists the criteria by which the resource should be evaluated.

OER is an international attempt to increase affordability and accessibility to education worldwide. It is also critical that the OER be compliant with federal and state accessibility

requirements. However, language and compliance with the Americans with Disabilities Act (ADA) are two major issues associated with OER adoption. Despite efforts to make OER accessible in multiple languages, many are still available only in English. According to Willems and Bossu (2012), this is one factor that currently limits the spread of OER globally.

Culture may be an issue as there are many OER that may not be culturally appropriate for all audiences. This issue arises from the nature of OER. Many faculty members develop OER to meet the needs of their specific class and cultural context. This specificity may make adoption difficult if the faculty member reusing the resource does not have classes with similar characteristics.

The currency of the OER is another issue to consider. Given the fact that OER creators generally do not receive compensation for their contributions, there may be little incentive for them to do updates and ensure that their OER continue to be relevant and available online. Permanence can also become an issue since OER, like other resources on the open web, can be removed if it is not archived or backed up in a trusted repository. Many faculty members also voiced concerns about the long-term viability of OER, the lack of financial incentives, irregular updates and maintenance of OER content (Seaman and Seaman, 2017).

Adopting OER: Navigating the Challenges

Despite the many benefits associated with the adoption of OER, there are several challenges, one of which is the absence of ancillary resources. Although some OER projects such as OpenStax are working to incorporate supplementary resources for their courses, many open resources lack ancillaries such as instructor copies, outlines, quizzes/tests, clicker exercises, and other materials that are available through traditional publishers. This may be a big adjustment for faculty who depend on the traditional ancillary resources.

Another challenge is the time-consuming process to create new or locating existing OER. The results from the 2017 survey show that the most serious challenge faculty face with the adoption of OER continues to be the time required to find and evaluate suitable material since there is no central OER repository (Seaman and Seaman, 2017). Despite the plethora of OER, nearly one-half of all faculty reported that they were unable to find enough resources for their discipline (47%), and 50% stated that it was too difficult for them to find what they needed.

These rates exceed those of any other potential barrier and remain a top challenge for faculty as the pattern has been consistent over time (Seaman and Seaman, 2017).

Opportunities for Librarians

Library support for OER adoption can help to establish the value of libraries within the academic institution. Librarians are adopting leadership roles to promote and raise awareness as to the benefits and plethora of OER available to faculty and students. One institutional library that is already heavily engaged in the OER movement is the Open Education Initiative at the University of Massachusetts at Amherst, which spearheaded an initiative providing OER support and professional development to faculty (Salem, 2017). Specifically to Florida, the University of North Florida's Thomas G Carpenter Library through a joint effort with the Center for Instruction and Research Technology (CITRT) has developed a course that introduces faculty to OER, copyright in the creative commons realm and instructional design with the objective of increasing faculty adoptions of OER. A stipend of \$1000 is given to faculty who complete the training and adopts an OER in their course (University of North Florida, n.d.). Florida State University Libraries also hosts open workshops and presentations covering a range of topics, including "Getting Started with Open Educational Resources", "Copyright Support", and "Know Your Copyrights - Fair Use". Florida State University Libraries, in addition to the open workshops and presentations, also hosts one-day Open Education Symposiums. Both of these initiatives by Florida State University Libraries aim to raise awareness about OER and the cost-saving potential of OER adoptions (Florida State University, n.d.).

Due to their pervasive scope and the specific skillset of librarians, they are keenly positioned to become the leaders of the OER adoption movement on their campus (Woodward, 2017). Librarians already possess the research skills to locate and assess materials, and with the growing interest in OER, they can hone these skills to assist faculty members to access OER for their review. This assistance will no doubt reduce the amount of time the faculty member will spend searching for OER on their own and may even alleviate the frustrations for faculty.

Providing support to faculty for their adoption of OER is not very different from the traditional support provided by librarians. Librarians can assist faculty with evaluating OER for

credibility and currency, but as the subject specialist, the faculty will be ultimately responsible for assessing these resources for suitability before adopting.

Librarians can use their knowledge of copyright to assist faculty in understanding these OER permissions in the public domain and creative commons. In their attempts to assist faculty with the licensing nuances, librarians may need to advance their professional development in areas such as copyright laws and CC licenses so that they can explain the variations of these licenses and the ways in which they can be used.

Libraries have always served as repositories for materials to support the teaching and learning objectives of their parent institutions. Finding, organizing and storage of information are at the cornerstone of librarianship. One existing tool that librarians can use to collate OER for faculty is through the creation of online subject guides. As is the case with Valencia College and several other colleges in Florida and across the USA, the libraries have created online subject guides specifically to provide access to OER repositories. These online subject guides serve as a single portal from which faculty can search OER repositories rather than searching for these repositories independently. These online subject guides can also be customized to provide suggestions for discipline-specific OER and as information hubs for faculty on OER selection and adoption.

Awareness should also be raised about the pedagogical and financial benefits of OER to students, faculty, and the institution. Students would be able to significantly reduce their costs while improving performance. The library can locate and make these resources accessible to students, thereby reducing the cost associated with purchasing the required textbook and course materials. Faculty would be able to adapt materials to make them more relevant while improving their learning outcomes, and the institution would increase both their retention and completion rates. The library is poised to take on this communication role since the library spans across all disciplines and can be the nexus of communication for campuses considering OER. The required communication and network building can be achieved through workshops and consultations between the liaison librarian and faculty.

Liaisons can also be formed between the library and student organizations to raise awareness of the benefits of OER to the student population. Working with the bookstore to provide in-demand printing services of OER text can also be beneficial to students. Some

students may still prefer a printed version of their text, and the bookstore can satisfy that need at a minimal cost.

Libraries can use OER as a tool to market the library's resources which are selected and curated with affordability and student success in mind. Even though the library's resources are not OER due to the non-derivative and copyright issues, they can be used as alternative and supplemental materials to further enhance courses within the boundaries of their copyright restriction. Although they are not free to the library, they are free to students and are particularly useful in an electronic format with unlimited users. OER textbooks can also be added to the catalog as has been done at Valencia College, and one campus even has printed versions of several OER textbooks in their collection.

Conclusion

Education is about the sharing of ideas, knowledge, and research to create an equal world, and OER facilitates this sharing in education. OER encapsulates the essence of accessibility, affordability and equality in education by providing students access to learning materials.

Even though there are many benefits that can be derived from the use of OER, adoption has been relatively low in higher education in the US. The adoption of OER may be hindered by several factors, including a lack of awareness of OER compounded by a high level of obscurity in relation to CC licenses. Addressing these issues require campaigns to raise awareness about the advantages and possibilities of CC licenses and OER in general. Librarians can play a pivotal role in the education of and communication about OER as well as in the curation and dissemination of OER.

REFERENCES

- Abelson, H. (2008). The creation of OpenCourseWare at MIT. *Journal of Science Education & Technology*, 17(2) 164. doi:10.1007/s10956-007-9060-8
- Adamich, T. (2011). Open educational resources (OERs) and metadata: The future of textbook access and usability. *Technicalities*, 31(1), 10–13. Retrieved from <http://technicalitieskc.com>
- Atkins, D. E., Brown, J. S., & Hammond, A. L. (2007). *A review of the open educational resources (OER) movement: achievements, challenges, and new opportunities*. Retrieved from <http://.hewlett.org/wp-content/uploads/2016/08/ReviewoftheOERMovement.pdf>
- Boston College. (2017). *Library FAQs: Q. Does the library have textbooks?* Retrieved from <https://answers.bc.edu/faq/136617>
- College Consortium for Open Educational Resources (2018). *Community of practice for open education*. Retrieved from <https://www.cccoer.org/>
- Florida State University. (n.d.). *OER & affordable textbook initiative*. Retrieved from <https://lib.fsu.edu/textbook-affordability>
- Florida Virtual Campus Office of Distance Learning & Student Services. (2016). *2016 Florida student textbook & course materials survey*. Retrieved from <https://www.flvc.org/documents/96858/931951/2016+Student+Textbook+Survey.pdf/591cf5b0-bbe8-406d-acd8-b23d89b8577f>
- Hayward, C., & Willett, T. (2014). *Acceleration effects of curricular redesign in the California acceleration project*. Berkeley, CA: The Research and Planning Group for California Community Colleges. Retrieved from <http://accelerationproject.org/portals/0/Documents/rp-evaluation-cap.pdf>
- Online Sunshine. (2018). *The 2017 Florida statutes*. Retrieved from http://www.leg.state.fl.us/statutes/index.cfm?mode=View%20Statutes&SubMenu=1&Ap_p_mode=Display_Statute&Search_String=textbooks&URL=1000-1099/1004/Sections/1004.085.html
- OpenStax. (2018). *OpenStax*. Retrieved from <https://openstax.org/impact>
- Poppick, S. (2015). Here's what the average grad makes right out of college. *Money*. Retrieved from <http://time.com/money/collection-post/3829776/heres-what-the-average-grad-makes-right-out-of-college/>

- Salem, J. A. (2017). Open pathways to student success: Academic library partnerships for open educational resource and affordable course content creation and adoption. *Journal of Academic Librarianship*, (1), 34–38. doi:10.1016/j.acalib.2016.10.003
- Seaman, J. E., & Seaman, J. (2017). *Opening the textbook: Educational resources in U.S. higher education, 2017*. Babson Survey Research Group. Retrieved from <http://onlinelearningsurvey.com/reports/openingthetextbook2017.pdf>
- State University System Board of Governors. (2015). *Online education: 2025 strategic plan*. Retrieved from <https://www.flgov.com>
- Steen, K. (2017). *The scholarly publishing and academic resources coalition (SPARC) 2017 OER State Legislation Roundup, Open Education*. <https://sparcopen.org/news/2017/2017-oer-state-legislation-roundup/>
- Sullivan, D. (2010). The hidden costs of low four-year graduation rates. *Liberal Education*, 96(3), 24–31. Retrieved from <http://www.aacu.org/>
- United States Government Accountability Office. (2005). *College textbooks: Enhanced offerings appear to drive recent price increases (Report to Congressional Requesters No. GAO 05–806)*. Washington, DC: U.S. Government Accountability Office. Retrieved from <https://files.eric.ed.gov/fulltext/ED497038.pdf>
- United States Government Accountability Office. (2013). *College textbooks: Students have greater access to textbook information (Report to Congressional Committees) No. GAO 13–368*. Washington, DC: U.S. Government Accountability Office. Retrieved from <https://www.gao.gov/assets/660/655066.pdf>
- University of North Florida. (n.d.). *UNF open educational resources (OER) initiative*. Retrieved from <https://www.unf.edu/cirt/oer/open-educational-resources-initiative.aspx>
- Willems, J., & Bossu C. (2012). Equity considerations for open educational resources in the glocalization of education. *Distance Education*, 33(2), 185–199. doi:10.1080/01587919.2012.692051
- Woodward, K. M. (2017). Building a path to college success: Advocacy, discovery and OER adoption in emerging educational models. *Journal of Library & Information Services in Distance Learning*, 11(1–2), 206–212. doi:10.1080/1533290X.2016.1232053