Benefits of Open Educational Resources Adoption

By Alexis Michelle Carlson, MLIS

Indian River State College

Abstract

Through a series of workshops and incentives faculty will learn the benefits of adopting open

educational resources (OER) in their classroom in place of costly publisher provided textbooks.

Participants will commit to adopting OER in their course for at least three semesters. Indian

River State College librarians know the value of OER having only taught credit courses using

OER materials. Furthermore, librarians specialize in collecting, storing, describing, and

evaluating information. Knowledge of OER and access to over one million library licensed

scholarly materials makes a librarian the best person to implement college-wide, innovative

OER adoption.

Project Problem or Need

The Consumer Price Index shows an increase of 800% in textbook prices over the past thirty

years (Kingkade, 2014; Perry, 2015), the highest estimate places this increase at 1041% from

1977 to 2016 (Senack & Donoghue, 2016). The rate of inflation for textbooks surpasses the cost

of living, medical services, and the price of a new home for the same time period. In a recent

survey of 5,000 US college students, one third have used financial aid to cover the cost of

textbooks and 50% of students enrolled in community college use

financial aid to offset textbook costs (Senack & Donoghue, 2016).

This places the community college student at a disadvantage as

they are paying roughly $34.72 more per $150 textbook than those

who cover these costs outright (Senack & Donoghue, 2016).

In addition to rising textbook prices, the number of student

borrowers has increased along with the total student loan debt

accumulated by borrowers. According to one report the number of

debtors and the amount of debt accumulated has outpaced the

cost of tuition and the number of students who enroll in college

(Fry, Parker, & Rohal, 2014). Student debt exceeded 1.2 trillion

dollars in 2013, with the increased debt taken on by borrowers

comes other anxieties. Numerous studies show that debtors put off

marriage, purchasing a house, or attending graduate school as

compared to non-borrowers (Gale, Harris, Renaud, & Rodihan,

2014).

Growth of Annual Student Borrowing Outpaces Growth in Students

In billions of 2012 dollars

Annual student loan issuance up **352%**
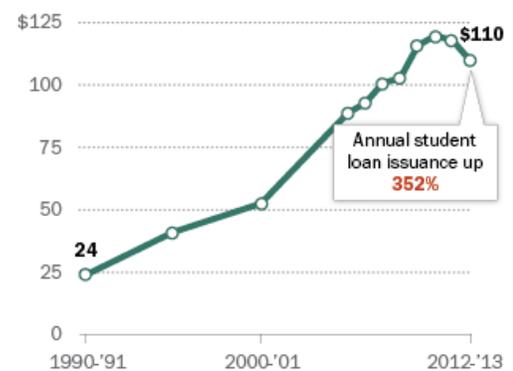
In millions of postsecondary full-time equivalent students

Postsecondary enrollment up **62%**
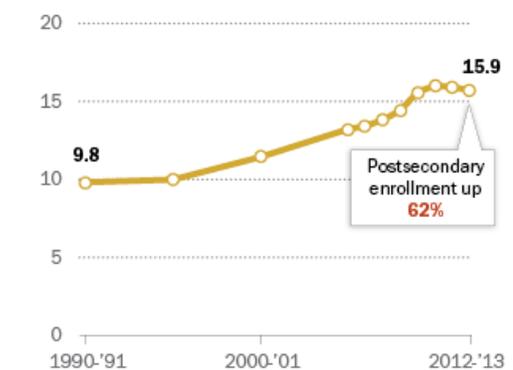
Source: Sandy Baum, "The Evolution of Student Debt in the U.S.: An Overview."

PEW RESEARCH CENTER

Relation of the Proposed Project to the College Mission

A successful completion of this project would address the IRSC's commitment to its students.

> Open educational resources (OER) are teaching and learning materials that you may freely use and reuse at no cost. Unlike fixed, copyrighted resources, OER have been authored or created by an individual or organization that chooses to retain few, if any, ownership rights. In some cases, that means you can download a resource and share it with colleagues and students. In other cases, you may be able to download a resource, edit it in some way, and then re-post it as a remixed work. How do you know your options? OER often have a Creative Commons license to let you know how the material may be used, reused, adapted, and shared. (Institute for the Study of Knowledge Management in Education, 2015)

OER include faculty or student made products. The key to their successful use in a college course, as a replacement to costly textbooks, is that the material has been evaluated by the faculty member or other experts in the field. OER evaluation includes factors such as currency, relevancy, authority, objectivity, and organization/effectiveness of the material. Use of open materials cultivates student success by removing an additional barrier to a student's path to graduation. Students who do not need to purchase additional materials for a course are free to take more courses thus decreasing the time it takes for them to achieve degree completion. The commitment faculty spend on locating, cultivating, and evaluating resources creates a superior teaching and learning environment. Open source textbook adoption equals many hours spent by the faculty member, searching, reading, and locating the best sources of information. It also means that faculty member has committed to this resource and he or she will teach from a source that is "tailored to the class, the students, and the instructor's teaching style" ("Adoption Resources," 2015). Thoughtful preparation and dissemination of knowledge embraces the diversity of our student population.

Student developed OER exposes them to active learning. Students may also take a more vested interest in the college culture as a result of student authored material used as course curriculum (American Council on Education, 2015). Now is the time to make partnerships and expand opportunities for networking with our peers. The Florida legislature will vote on a bill to require public institutions of higher learning to make available the actual costs of textbook materials in the college's course registration system (Education Access & Affordability, 2016). IRSC needs to remain ahead or at pace with other colleges in the state in order to remain competitive in attracting students to our programs. A foundation sponsored grant that establishes a best practice of exchanging high priced textbooks with OER adoption has the potential to make this practice a reality.

"The worldwide OER movement is rooted in the idea that equitable access to high-quality education is a global imperative" (Institute for the Study of Knowledge Management in Education, 2015). The OER movement started 19 years ago when the Internet first came to fruition. The past ten years have seen a tremendous growth in content and access made freely available with Creative Commons licensing. Traditional textbook use in higher education has been allowed to run rampant due to a lack of economic forces that drive prices down. Textbook buyers exist in a non-competitive world. The other economic force lacking in the publishing world is competition among publishers. Five publishers control 80% of the publishing market (Senack & Donoghue, 2016). OER adoption may stimulate economic growth locally and internationally. We are all potential content creators with a self-publishing tool available to all. Information, communication, and technology (ICT) literacy is learned within the context of specific disciplines. A primary source for a biologist is very different than a primary source for a

historian. Use of OER in place of textbooks exposes students to more varied sources of information, ones that teach students how to search for and evaluate the information found rather than taking all information at face value. Student involvement in curating content for future classes or even creating their own is possible with OER in place of textbooks. For example, mathematical theorems are not copyright protected, there is no reason that a student who masters one theorem cannot teach others the thinking process and logic that goes into solving other problems. Such learning tasks make for a highly skilled workforce.

The need to stay current in one's discipline means faculty already consume the knowledge they need to keep course content up to date, by disseminating that knowledge through remixing open content the professor gains a much deeper understanding than a mere consumer of such work. OER creation and adoption has the potential to showcase the need for lifelong learning to our students through faculty involvement.

Relation of the Proposed Project to the Department/Division Planning Objectives

The Learning Resources Department's purpose "is to support the College's mission by providing dedicated service, effective instruction, and quality resources to the college community." The IRSC Librarians actively promote OER adoption to faculty. Lacking in our efforts to institute change are incentives and a strong administrative backing of OER adoption.

Identification of the Population to be Served

The following numbers represent one high enrollment course at IRSC and the potential for savings if one course replaces required textbooks with OER. Fifty-one sections of ENC1101 were offered in spring 2016. If each class accepts 30 students, potentially 1,530 students took that course. Required textbooks for ENC1101 totaled $199.30. Using OER in place of required

textbooks could have saved students $304,929. If the students used financial aid to pay for

these textbooks they would pay $70,580 more in total <u>for the required textbooks for one</u>

<u>course at college</u>. The potential savings for our students is astronomical.

Potential of Proposed Project to Improve Instruction

Scholarship makes for great teaching. Boyer argues

As a scholarly enterprise, teaching begins with what the teacher knows. Those who teach must, above all, be well informed, and steeped in the knowledge of their fields. Teaching can be well regarded only as professors are widely read and intellectually engaged. (1990, p. 23)

Changing a course from textbook content to open content will take time and scrutiny of

materials available to professors in the beginning, but once the materials are in place for a

course, updating it does not take as much time or effort. The research, consultation of available

library resources, and evaluation of materials only serves to educate the instructor on current

knowledge in their field of study. In short, steeping professors in the scholarly literature only

helps to make faculty more aware, information literate, and better suited to teach students.

Potential of Proposed Project to Improve Professional Development

This project can improve professional development by asking faculty to adopt and use

technology to provide students free sources of information to learn the content in a course.

Use of digital learning tools has been identified as one practice that needs expansion in a recent

survey of Association of American Colleges & University member institutions (AAC&U, 2016). A

series of workshops and faculty-led panel discussions in the Institute for Academic Excellence,

library, during adjunct professional enhancement day, and the fall faculty symposium are all

outlets for faculty to learn about OER and how they can help students succeed.

Overall Benefit of Proposed Project to Benefit IRSC, Students, and the Community

In a 2012 Florida college student textbook survey, 49% of respondents reported taking fewer

courses due to the high cost of textbooks (Florida Virtual Campus, 2012). About one quarter of
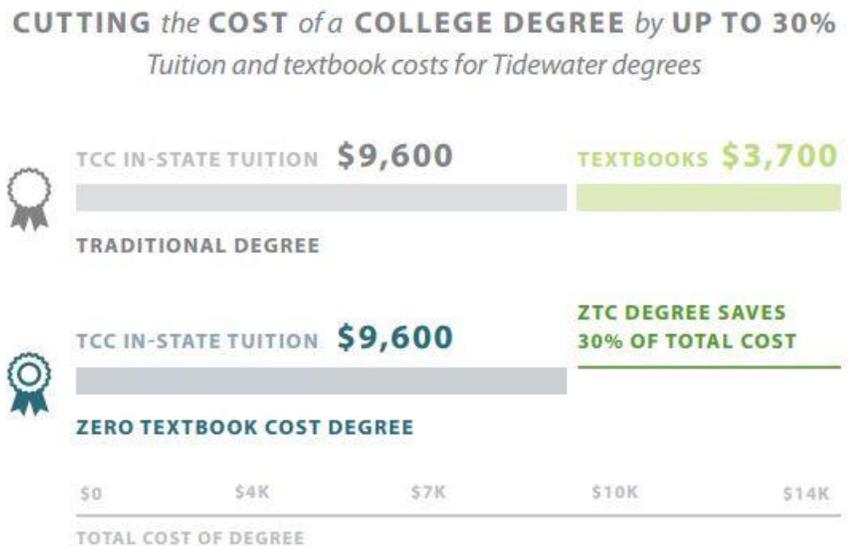
PIERCE OPEN PATHWAY
The Pierce Open Pathway (POP) is a university transfer degree with no textbook costs. Students who follow the pathway can earn an Associate of Arts direct transfer degree (AA-DTA) online using alternatives to traditional textbooks. POP courses feature low/no cost learning resources to support student learning and success. Currently the POP is open to all students through the program at Pierce College at JBLM. Interested students should contact their advisor for information about eligibility and registration.

those surveyed reported dropping a course

(27%) and withdrawing (21%) as consequences

of high textbook prices. A shocking 45% of

survey participants admitted to not registering

for classes due to high costs associated with textbooks (Florida Virtual Campus, 2012). Schools

that have implemented some type of OER course or OER degree are able to promote these

savings to students. IRSC would benefit from this type of exposure, allowing faculty to compete

for students, market potential savings, and incentivize completing a degree.

Impact and Collaboration

The potential to impact every student

who enters IRSC is made possible by

the inevitable elimination of the most

used, expensive textbooks. The U.S.

Department of Education (DOE) has

taken the lead in adopting OER by

making a new position last year, the

CUTTING *the* **COST** *of a* **COLLEGE DEGREE** *by* **UP TO 30%**
Tuition and textbook costs for Tidewater degrees

TCC IN-STATE TUITION **$9,600**   TEXTBOOKS **$3,700**

TRADITIONAL DEGREE

TCC IN-STATE TUITION **$9,600**   ZTC DEGREE SAVES
                                          30% OF TOTAL COST

ZERO TEXTBOOK COST DEGREE

$0 $4K $7K $10K $14K

TOTAL COST OF DEGREE

first ever open education advisor (DOE, 2015). In a more nuanced review of textbook costs and

effects on students, Hill (2016) found that first time in college, first year college students pay

more for textbooks than other students. In addition, the lower socioeconomic student does not

even apply for college based on the high cost of tuition and textbooks (Hill, 2016). Holden

(2014) points out the potential for OER adoption to revolutionize "the education of millions of students who live in rural poverty within the United States" (p. 71). Currently, OER development occurs in third world countries where lack of tangible resources is the main barrier to a higher education. The use of OER can expand our pool of students as those who could not afford print materials may choose to attend a college that makes an education possible by giving students the resources necessary to succeed.

In 2015, the William and Flora Hewlett Foundation awarded over 25 million dollars for projects related to open educational resources. After funding OER initiatives since 2002, the Hewlett Foundation has recognized problem-solving pathways to focus on over the next years in order to bring OER adoption into the mainstream. The first pathway is the creation and adoption of open source textbooks to replace costly texts in introductory courses. The second pathway is termed the zero textbook cost degree. This involves the development of two year degrees that take students through a course of study with courses committed to using OER exclusively, making it possible for students to earn a degree without spending money on a textbook. Collaboration would occur on campus between faculty of various disciplines, instructional designers, and librarians. As OER experts are identified on campus we can collaborate with IRSC counselors to discuss potential zero textbook cost degree pathways and collaborate with schools outside of IRSC to offer our best practices to those wishing to adopt OER. The potential to expand and sustain the project past the first three years is possible by applying for William and Flora Hewlett Foundation grants. Showing the Hewlett Foundation that IRSC is committed to OER adoption before applying for one of their many grant opportunities would give IRSC a better chance at a successful application.

<u>ENDOWED TEACHING CHAIR PROJECT OUTCOMES</u>

Project Details	Tasks	Evaluation Methods	Timeline	Sustainability beyond 3 years
Year 1	Promote OER to faculty through professional development activities at the Institute for Academic Excellence (IAE), fall symposium, Adjunct PED, library coffee hour, etc. Find three interested faculty to adopt OER for one course and use for a period of no less than three semesters.	Assessment of presentations given in the IAE, fall symposium, Adjunct PED, library coffee hour, etc. Every step of OER adoption will have a survey assessment to help improve the workshops and process. Comparison data to non-OER courses will give us student success and completion rates.	One academic year to identify faculty and for them to choose OER for course, etc. One semester for faculty to use OER in course and replace content that does not work. One semester for faculty to teach course with OER again and replace again. One semester for faculty to teach course with OER and give final report of results.	Faculty will be chosen based on student impact and interest in using OER longer than grant period.
Year 2	Panel discussion of OER adoption by faculty and instructional designer at fall symposium or in the IAE. Find three additional faculty to adopt OER.	Assessment of presentations given in the IAE, fall symposium, Adjunct PED, library coffee hour, etc. Faculty survey & comparison data described above.	One academic year to identify faculty and for them to choose OER for course, etc. One semester for faculty to use OER in course and replace content that does not work. One semester for faculty to teach course with OER again and replace again. One semester for faculty to teach course with OER and give final report of results.	Faculty will be chosen based on student impact and interest in using OER longer than grant period.

| Year 3 | Panel discussion of OER adoption by faculty and instructional designer at fall symposium or in the IAE. Find three additional faculty to adopt OER. Identify available grants outside of IRSC to continue with OER adoption project. | Assessment of presentations given in the IAE, fall symposium, Adjunct PED, library coffee hour, etc. Faculty survey & comparison data described above. | One academic year to identify faculty and for them to choose OER for course, etc. One semester for faculty to use OER in course and replace content that does not work. One semester for faculty to teach course with OER again and replace again. One semester for faculty to teach course with OER and give final report of results. | Faculty will be chosen based on student impact and interest in using OER longer than grant period. Apply for identified grants to continue with project to incentivize faculty OER adoption. |

ENDOWED TEACHING CHAIR PROPOSAL BUDGET
$4,000 per year can be used to implement the proposed plan.
***Please discuss the budget with your dean

Budget Item (Salaries/Equipment/ Expenses)	Cost (List amount and source of figures)	Justification
Year 1	$750 stipend for three faculty members to find or create and use OER content for one course. Or smaller increments for faculty to adopt an OER textbook from Openstaxcollege.org or other known, quality OER text $750 stipend for one instructional designer to conduct workshops, training, & lend expertise to help faculty integrate OER successfully $1,000 for food and/or other incentives to attend initial workshop	Faculty have not taken advantage of offers for past collaborations to change courses to OER use. The use of monetary incentives has the potential to give faculty a reason to make the switch to OER. Instructional designers are willing and able to give expertise in the adoption of OER. IAE workshops are more popular when food is offered. Software or technology devices associated with self-publishing may be identified as faculty go through the process of learning about OER development within their disciplines.
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ALEXIS MICHELLE CARLSON

EDUCATION
Master of Arts, Library and Information Science, 2007, GPA 3.97
University of South Florida, Tampa, FL
Bachelor of Science, Early Childhood Education, 2000
Boston University, Boston, MA

PROFESSIONAL EXPERIENCE

Indian River State College, Miley Library, Ft. Pierce, FL (October 2009-Present)
Faculty Reference Librarian/Assistant Professor

Palm Beach Community College LLRC, Belle Glade, FL (July 2008-October 2009)
Reference Librarian

Florida Atlantic University, S.E. Wimberly Library, Boca Raton, FL (August 2005-May 2006)
Senior Library Technical Assistant

Borders Bookstore, Coral Springs and Boynton Beach, FL (October 2001 to August 2005, and December 2006 to November 2007)
Inventory Supervisor (March 2004 to August 2005)
Café Supervisor (October 2001 to March 2004)

PROFESSIONAL AFFILIATIONS
Member of **ALA** since January, 2006

AWARDS
- Association of Florida College's Technology Commission Award for **"Digital Badges: Offering Students an Opportunity to Show their Skills"**
- Association of Florida College's Learning Resources Commission Best Practice Award for **"Optimizing LibGuide Content: Marketing Yourself and Your Work Online (With or Without LibGuides)"**

COMMITTEES
- Co-Chair of the Institute for Academic Excellence's Professional Learning Community for Publication (2014-present)
- Member of the Florida Virtual Campus User Interface Committee (2013-present)
- Statewide Committee on Information Literacy (2010-co-chair; 2011-2014-chair)
- LIS2004 Revision Committee Member (2011-present)
- Served on the IRSC Global Initiatives Workgroup, College Awards Ceremony Committee, Adjunct Priority Workgroup, Adjunct Awards Ceremony Subcommittee, Honors Committee
- Served on the Central Florida Library Cooperative Government Documents Committee

PRESENTATIONS
- All Day Hands On Workshop, co-presented **"E-Skills for Digital Reference"** to other librarians at the Northeast Florida Library Information Network
- **"Library Services and Resources 2.0"** presented at IRSC President's staff meeting, IRSC Campus Coalition Government meeting, and IRSC Distance Learning Workgroup meeting
- **"eBooks"** presented at IRSC President's staff meeting

- **"Mobile Instant Messaging Reference Services"** presented at the College Center for Library Automation Region Five User's Meeting at Broward College
- **"What is copyright and how do you protect your work?"** co-presented at the Treasure Coast Photography Club
- **"How Ask A Librarian Works"** to the Virtual Office Hours Committee
- **"Overcoming the OER Obstacle"** co-presented at the 2013 IRSC fall faculty symposium
- **"Scholarly Communication: Open Access Publishing & Author's Rights"** co-presented at the Institute for Academic Excellence every semester since spring 2015
- **"Open Educational Resources"** co-presented at IRSC's fall faculty symposium 2015
- **"Libraries in Your Pocket: Connecting Students to Course Resources"** co-presented a poster session at the 2015 annual Florida Association of Colleges & Research Libraries conference
- **"Optimizing LibGuide Content: Marketing Yourself and Your Work Online (With or Without LibGuides)"** presented at the 2015 Association of Florida College's annual conference

Digital Footprint

COMMUNITY LEADERSHIP

Co-Advisor of the River Readers Book Club at IRSC (2012-Present)

***Florida Atlantic University SE Wimberly Library, Boca Raton, FL (Summer 2007)***
Volunteer in Special Collections Department at SE Wimberly Library

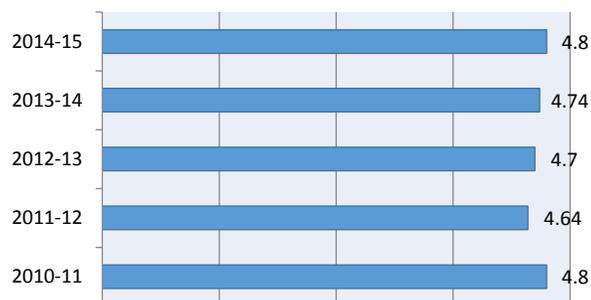***Americorps Jumpstart, Boston, MA (November 1997-May 1999)***
Corps Member at Headstart Preschools in Boston Area

RECORD OF OUTSTANDING TEACHING

Course Success Rates

Carlson: 84.3%, 90%, 90%, 86.5%
Department: 87%, 87.5%, 87.3%, 88%
(2011-12, 2012-13, 2013-14, 2014-15)
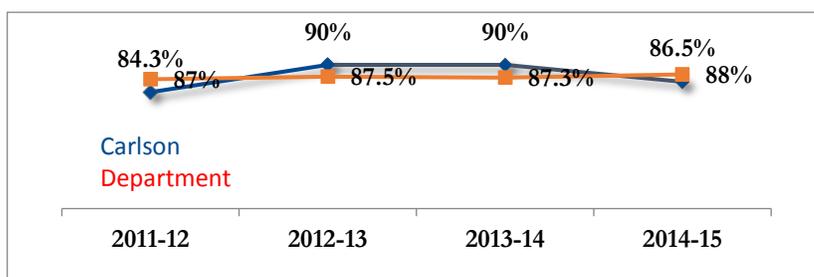
Student Evaluations (n=760)

Year	Rating
2014-15	4.8
2013-14	4.74
2012-13	4.7
2011-12	4.64
2010-11	4.8

Connecting Students to Resources

	2011-12	2012-13	2013-14	2014-15
Searches/Usage of Department's LibGuides	61,384	85,095	194,084	307,546
Searches/Usage of Carlson's LibGuides	21,816	36,915	80,361	142,308
Carlson's Percentage of Department's Total	35.5%	43.4%	41.4%	46.3%

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general education design, learning outcomes, and teaching approaches: Key

findings from a survey among administrators at AAC&U member institutions.

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