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Open Educational resource (OER) Adoption in Higher education: Examining institutional perspectives

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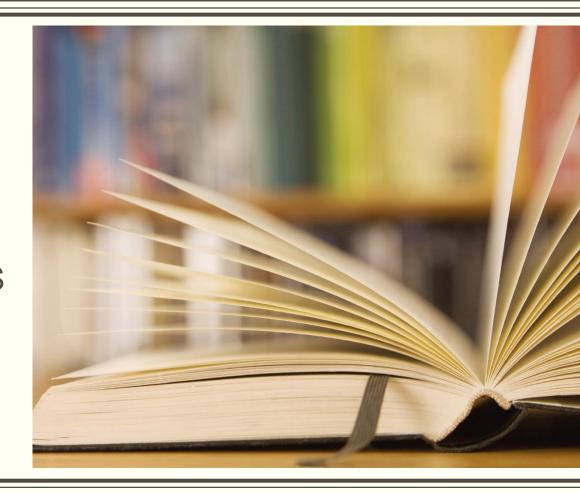
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OPEN EDUCATIONAL RESOURCE (OER) ADOPTION IN HIGHER EDUCATION: EXAMINING INSTITUTIONAL PERSPECTIVES

NSU Digital Curriculum Conference

February 16, 2019



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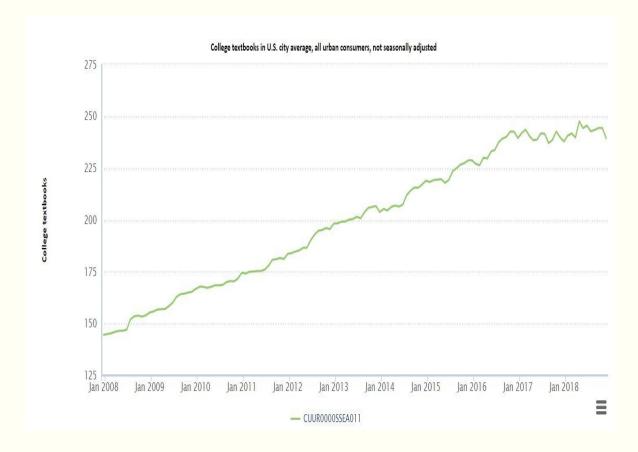
Introduction

This presentation focuses on institutional stakeholders' perspectives of OER adoption and integration at a state college in east Florida. Recommendations on implementing an institutional OER initiative at NSU will be presented, and ideas for leveraging institutional resources with a specific focus on librarian support will also be discussed.

Textbook Affordability and Textbooks in Higher Education

Due to this increase. many students have opted out of purchasing required textbooks for A Florida study found that classes. 67% of students opted out of purchasing textbooks for class (Florida Virtual Campus, 2016) Not purchasing textbooks may have a negative impact on a student's academic Institutions are performance. seeking affordable achievement, and and accessible completion. solutions to the textbook affordability problem.

The cost of traditional textbooks and materials has risen by as much as 103% over the past decade (U.S. Bureau of Labor Statistics, 2018).



What are OER's?

Open Educational Resources (OERs) are 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. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge. (Atkins, Brown, & Hammond, 2007, p. 4)





Context

2016

 A faculty librarian began spearheading an OER initiative at the state college in Florida to support the institutional adoption of OERs in an effort to replace costly traditional textbooks (Wright, 2018).

2017

- By 2017, only 3% of institutional faculty had adopted and integrated OERs into the curriculum as full textbook replacements.
- Also in 2017, the faculty librarian began offering faculty incentives in the form of a stipend to encourage a higher participation rate among faculty (Wright, 2018).

2018

• By the Spring semester of 2018, 23 courses were actively participating in the OER initiative at the institution, offering textbook free options for students (Wright, 2018).

Methodology

Design

An embedded single-case study design was used to collect data for the study.

<u>Interviews</u>

14 interviews were conducted with (7) institutional faculty, (3) librarians, and (4) instructional designers.

Survey

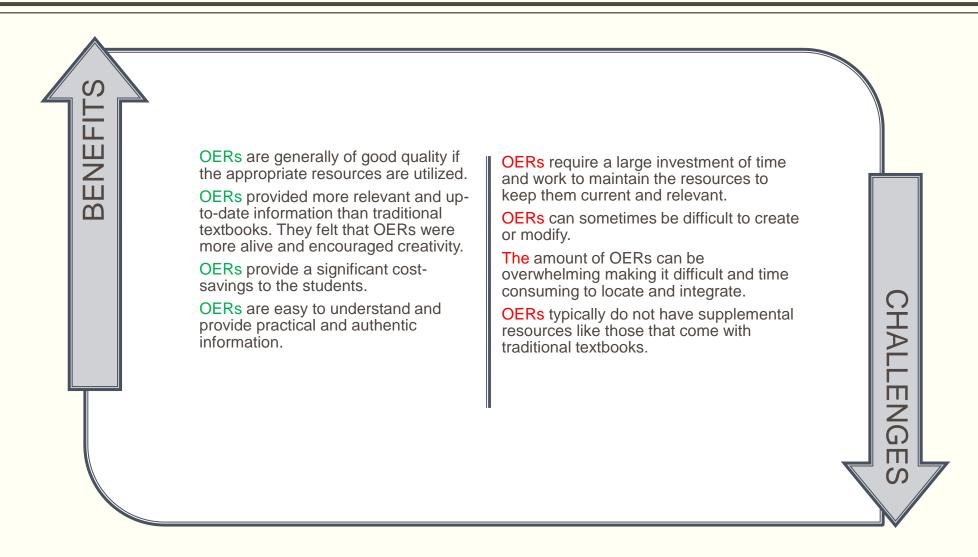
A survey was distributed to all students enrolled in one or more OER inclusive courses at the institution.



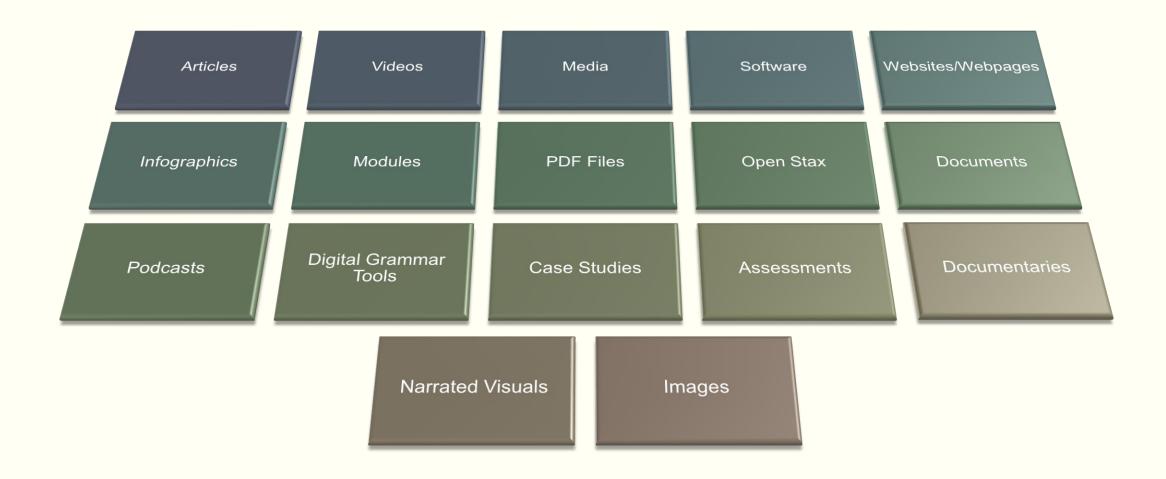
STAKEHOLDER PERSPECTIVES

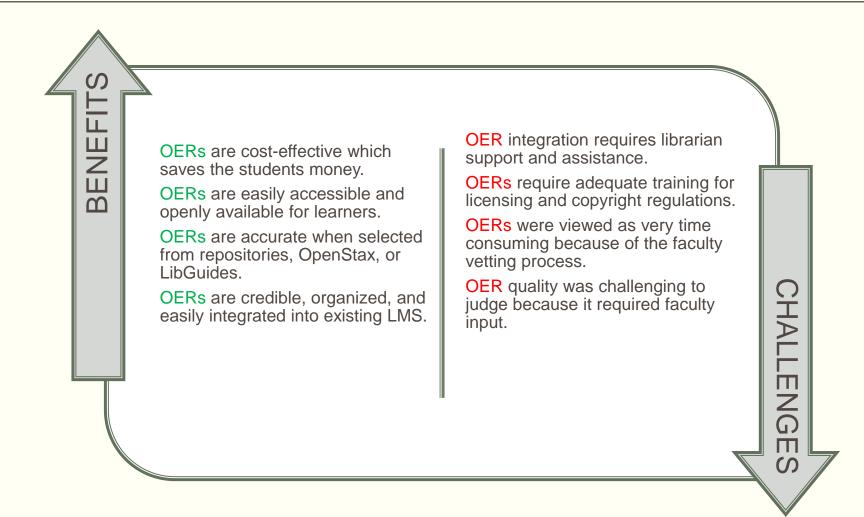
What did the data reveal?

Faculty Perspectives



Types of OERs Used by Faculty





BENEFIT

OERs are open and freely accessible.

There is an abundance of OERs available for adoption and integration.

OERs are free to utilize bypassing subscription fees to access them.

OERs as factually sound, easy to find, easy to use, and easy to implement.

OERs are adaptable promoting creativity and flexibility.

OERs are cost-effective resources.

OERs may sometimes be out of date when linking out to material/broken links.

OER curation is time consuming.

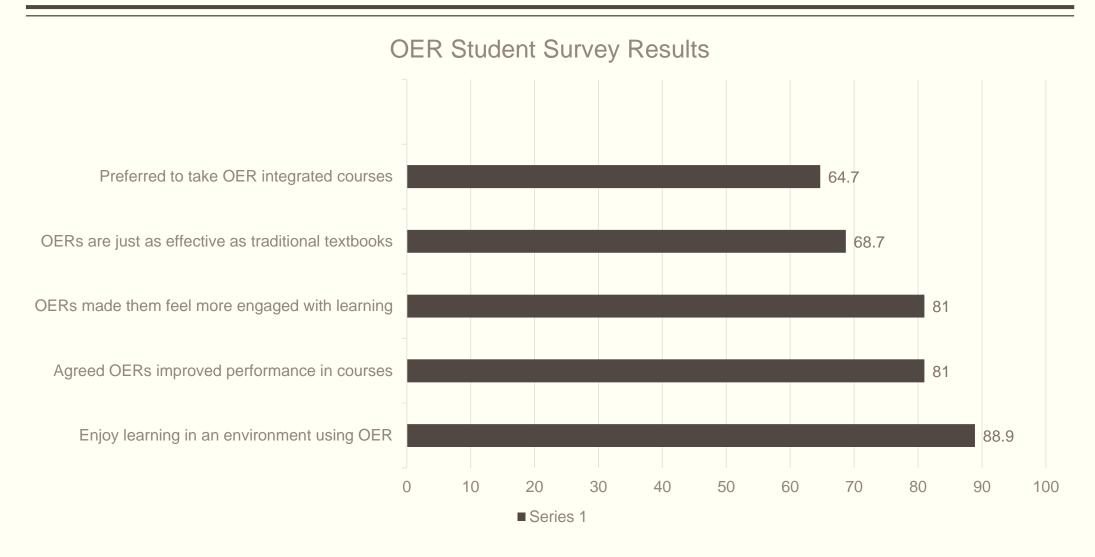
OERs sometimes have restrictive content licenses making it challenging to locate specific resources.

OER licensing and attributions may limit what can be done with the resources.

There is a general lack of understanding associated with OER licensing and copyright.

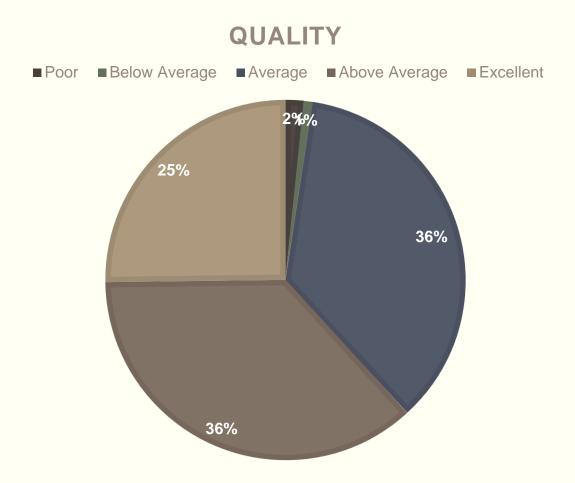
OER repositories are not as robust or comprehensive as anticipated making it time consuming to locate the resources. CHALLENGES

Student Perspectives



Student Perspectives – OER Quality

The students also commented on the overall quality of the OERs integrated into their courses.



Student Perspectives

Overall, learners were generally satisfied with the OERs integrated in their courses. The students perceived the OERs as engaging, advantageous, cost effective, easily accessible, and just as beneficial as traditional textbooks.

Learners also indicated that they prefer to learn using OERs and that they would recommend OER integrated courses to their peers.

Additionally, data indicated that students found OERs to have a positive impact overall on their learning.

Converging Themes



OER's are cost effective which benefits the students by saving money on required materials.



OERs are accessible.
Having early access to course materials may benefit students and increase overall success rates.



The successful adoption and integration of OERs largely depends on faculty utilization of institutional resources, specifically, institutional librarians.

LIBRARIAN ADVOCACY FOR OER ADOPTION

Leveraging Institutional Resources and OER

Why You Should Use OER in the Classroom

Free

• OERs are available online at no cost. They significantly reduce how much money is spent on textbooks.

Diverse

 OERs are available for courses across all majors and consist of a wide range of materials: assessments, assignments, books, case studies, courses, journals, primary sources, reference materials, simulations, tutorials, tests, textbooks, and more!

Dynamic

• OERs can be changed at any time and quickly made available. This increases the timeliness and relevance of the resources.

Unique

 OERs provide an engaging, customized learning experience due to the variety and versatility of the resources.

Impact of Using OER in the Classroom

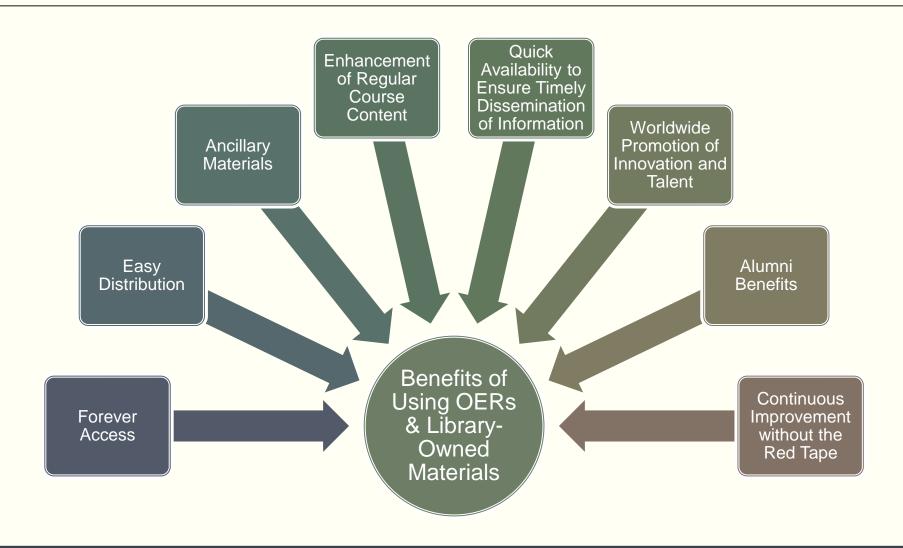
OER Impact:

Improve Student Learning

Increase Access to Teaching and Learning Resources

Expand Access to Learning

Benefits of Using OER and Library-Owned Materials



Finding OER

Mini Lessons, OER **Educational** Multimedia: **Full Courses:** Books, Repositories: **Institutions:** Coursepacks, Journals, Open Video •EdX **Reports:** •YouTube and •Coursera •MERLOT II University of Michigan •Podcasts (various) **Ancillaries:** • Future Learn •OER Commons Wikibooks •Ted Talks Open Classroom Yale University Open Textbook • Open Textbooks – SUNY • Merlot • Moving Image Library •Galileo Archive Open Textbook OER Commons Free Stock Library – University Linked In Learning Photography sites of MN (Mini Lessons and (Everystockphoto) NSU Shark Search Multimedia) Khan Academy •OER Commons •Wikimedia •Galileo Commons Merlot

Evaluating OER

Quality

•Similar to traditional course materials, many OERs go through peer-review to ensure the quality of the resources. OER collections often state their peer-review processes as well as provide the reviews online. It is important to note whether or not an OER has gone through peer-review when evaluating the resource.

Accessibility

•OERs should be accessible to all students. Guides and tools are available to help you evaluate the accessibility of OERs.

Copyright

- •For an online resource to be considered an OER, users must be able to retain, reuse, revise, remix, and redistribute it. Even though educators may be able to access an online resource, it does not mean that the creator has given them permission to adopt or adapt it for their courses. It is important to review the copyright and permissions of the resources before using them. If you do not see a clear permissions statement, you may need to contact the copyright holder and/or link to the resource without editing and/or uploading it.
- •Creative Commons licenses are commonly attached to OERs as they clearly state how others are (not) permitted to use them.

OER Evaluation Tools & Resources

- OER Accessibility (from https://libraries.etsu.edu/research/oer/evaluate
 - OER and Accessibility lists a multitude of resources on evaluating and finding OERs, specifically through MERLOT II.
 - BC Open Textbook Accessibility Toolkit provides information on evaluating and creating open textbooks, including a checklist for accessibility.
 - <u>Accessibility Module</u> outlines how to evaluate and create accessible video, images, course materials, and textbooks.
 - Web Accessibility Evaluation Tool analyzes websites to determine if they meet accessibility guidelines.
- Evaluation Rubrics, Checklist and Tools (from https://scholarlycommons.pacific.edu/oer/pro-con-oer.html)
 - Achieve's OER rubrics
 - Achieve.org has developed eight OER rubrics as well as an evaluation tool to help users determine the degree of alignment of OER to the Common Core State Standards, and aspects of quality of OER. More OER Rubrics training materials can be found through <u>Archieve.org</u> website.
 - [Summarized] Rubrics for Evaluating Open Education Resources Objects
 - This 2-page rubric is a synthesis version of the eight (8) separate rubrics for the evaluation of OERs created by ACHIEVE.org. It is meant as a ready reference for quick evaluation of an OER.
 - Achieve Open Educational Resources Evaluation Tool Handbook
 - This handbook will guide a user through the process of evaluating an online resources using Achieve OER Evaluation Tool, which is hosted on OERCommons.org.
 - <u>iRubric: Evaluating OER rubric</u>
 - Questions to ask about the OER you are thinking of using. This rubric is developed by Sarah Morehouse with help from Mark McBride, Kathleen Stone, and Beth Burns is licensed under a Creative Commons Attribution 3.0 Unported License.
 - OER Evaluation Checklist
 - A short checklist to complete when evaluating an OER.

Creating OERs

<u>A Guide to Adopting an Open Textbook (BCcampus)</u> is a reference for individuals or groups wanting to adopt an open textbook. This guide provides details on finding and evaluating textbooks, steps on adopting them, and the use of Creative Commons licenses.

<u>Adaption Guide (BCcampus)</u> is a practical guide about how to customize — or adapt — an open textbook so that it better fits your needs in the classroom and elsewhere. This guide defines the term adaptation and discusses reasons for revising a book, why this is possible with an open textbook, and the challenges involved.

<u>Open Education Self-Publishing Guide (BCcampus)</u> is a reference for individuals or groups wanting to write and self-publish an open textbook. This guide provides details on the preparation, planning, writing, publication, and maintenance of an open textbook.

<u>Modifying an Open Textbook: What You Need to Know (Open Textbook Network)</u> is a five-step guide for faculty, and those who support faculty, who want to modify an open textbook. Step-by-step instructions for importing and editing common open textbook file and platform types are included.

<u>Authoring Open Textbooks (Open Textbook Network)</u> is for faculty authors, librarians, project managers and others who are involved in the production of open textbooks in higher education and K-12. Content includes a checklist for getting started, publishing program case studies, textbook organization and elements, writing resources and an overview of useful tools.

<u>Creating and Modifying Open Educational Resources</u> is a chapter-by-chapter informational tutorial for faculty and staff interested in creating or adapting open educational resources.

Publishing OERs

For a work to be considered an OER, it is necessary to distribute it online and permit users to retain, reuse, revise, remix, and redistribute the resource.

Publication:

- Many platforms are available to distribute OERs online. For example, <u>OER</u>
 <u>Commons</u> and <u>MERLOT II</u> have free content builders for the creation of lessons, courses, and other types of OERs.
- NSUWorks, our institutional repository, is also available for NSU faculty to upload their OERs.
 Based on the type of OER, it may be more appropriate to add your materials to YouTube,
 Vimeo, Flickr or other websites for video/audio. You do not have to limit yourself to one platform.
 If you initially upload your materials to NSUWorks, you can also submit your materials for inclusion in OER Commons and MERLOT II.
- **Permissions**: The <u>Creative Commons 'Choose a License' tool</u> helps in finding a license that supports how you want others to use your work.

Copyright & Licensing

Copyright @ NSU:

NSU Office of Copyright

 (http://copyright.nova.edu/) can address
 any copyright concerns through the NSU
 Copyright Officer, Stephen Carlisle, J.D.

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 If you assign a Creative Commons license, you are not relinquishing your copyright but giving permission on how your work can be used. Licensing can become complicated when you adapt multiple materials published under different licenses and copyright. <u>Marking Your Work with a CC</u> <u>License</u> and provide guidance in this area.

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You let others copy, distribute, display, perform, and modify your work, as long as they distribute any modified work on the same terms. If they want to distribute modified works under other terms, they must get your permission first.

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You let others copy, distribute, display, perform, and (unless you have chosen NoDerivatives) modify and use your work for any purpose other than commercially unless they get your permission first.

NoDerivatives (nd)

You let others copy, distribute, display and perform only original copies of your work. If they want to modify your work, they must get your permission first.

Choose a license

This chooser helps you determine which Creative Commons License is right for you in a few easy steps. If you are new to Creative Commons, you may also want to read <u>Licensing Considerations</u> before you <u>get started.</u>



Get Started

The 5 Rs of Using OERs

Within the bounds of Creative Commons licensing there are 5 key points to consider when using OERs:

Reuse: Content can be reused in its unaltered form

Retain: Users have the right to make, archive, and "own" copies of the content



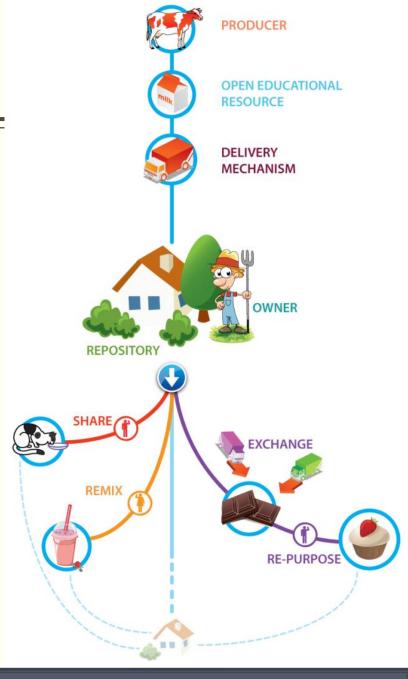
Revise: Content can be adapted, adjusted, modified or altered

Remix: The original or revised content can be combined with other content to create something new

Redistribute: Copies of the content can be shared with others in its original, revised or remixed form

An interesting OER metaphor

Milk	Role	OERs
Cow	Primary producer/creator	Teacher/author
Calf	Primary consumer	Enrolled student
Farmer	Secondary producer/repurposer	Learning technologist/Course leader
Milk bottlers	Primary supplier	Learning technologist
Shop	Secondary supplier	deposit in institutional repository or open deposit
Human family	Secondary consumer	Teacher within or outside institution
Human family and pets	Sharers and re-users	Enrolled students of that teacher
Person with milk, Person with cocoa powder, Person with sugar – can make chocolate	Exchange and repurposers	other teachers within or outside institution
Chocolate in shop fridge	repository	deposit in different open repositories
Chocolate eaten	re-users/maybe sharing	potentially global learners
Chocolate added to cake mixture	further re-purposing	potentially global teachers



Library-Purchased and Library-Housed Materials

NSUWorks Institutional Repository

Creative Commons
License and
attribution/citation
information included

No need to reinvent the wheel - OERs are designed to be revised, updated, and shared by their users Databased
Articles, Books/
Book Chapters,
and Reports

Create coursepacks through OpenURL

Statistical Resources

Primary Source Materials Multimedia and Streaming Content

<u>Video Databases</u>

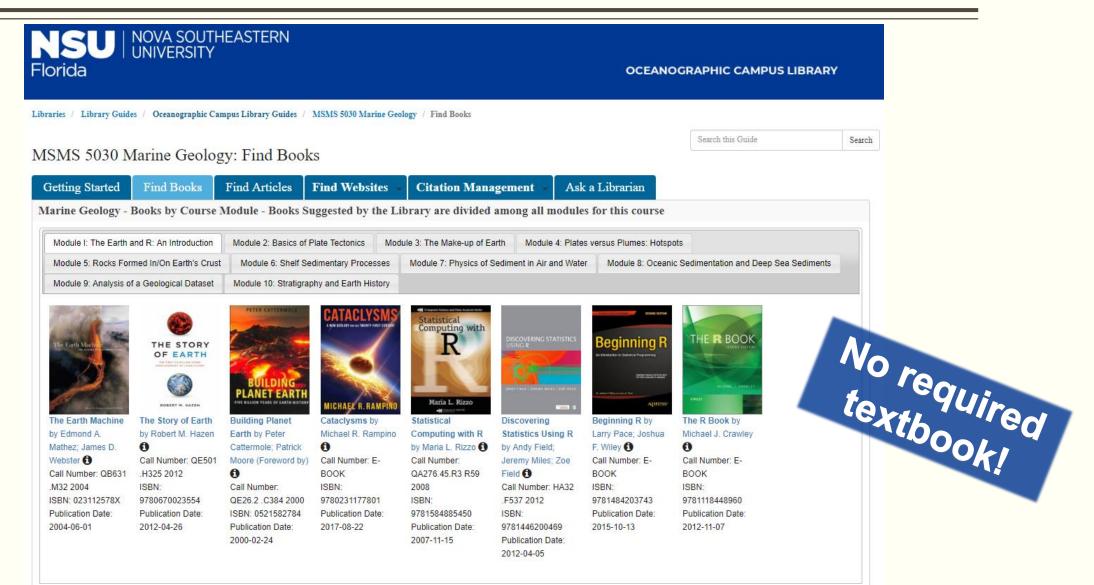
Test Practices & Online Tutorials

Library-Assisted Curation

Can Cherry Pick

<u>LibGuides /</u>
<u>Course Guides</u>

Library Curated Content Example - Course Guide with Books



Library Curated Content Example - Course Guide with Articles



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Course Readings

Module 1 Module 2

. Genomes in Three Dimensions

A DNA sequence isn't enough; to understand the workings of the genome, we must study chromosome structure.

. The genome of the choanoflagellate Monosiga brevicollis and the origin of metazoans

Choanoflagellates are the closest known relatives of metazoans. To discover potential molecular mechanisms underlying the evolution of metazoan multicellularity, we sequenced and analysed the genome of the unicellular choanoflagellate Monosiga brevicollis. The genome contains approximately 9,200 intron-rich genes, including a number that encode cell adhesion and signalling protein domains that are otherwise restricted to metazoans. Here we show that the physical linkages among protein domains often differ between M. brevicollis and metazoans, suggesting that abundant domain shuffling followed the separation of the choanoflagellate and metazoan lineages. The completion of the M. brevicollis genome allows us to reconstruct with increasing resolution the genomic changes that accompanied the origin of metazoans.

• The amphioxus (Branchiostoma floridae) genome contains a highly diversified set of G protein-coupled receptors

Background

G protein-coupled receptors (GPCRs) are one of the largest families of genes in mammals. Branchiostoma floridae (amphioxus) is one of the species most closely related species to vertebrates.

Results

Mining and phylogenetic analysis of the amphioxus genome showed the presence of at least 664 distinct GPCRs distributed among all the main families of GPCRs; Glutamate (18), Rhodopsin (570), Adhesion (37), Frizzled (6) and Secretin (16). Surprisingly, the Adhesion GPCR repertoire in amphioxus includes receptors with many new domains not previously observed in this family. We found many Rhodopsin GPCRs from all main groups including many amine and peptide binding receptors and several previously uncharacterized expansions were also identified. This genome has however no genes coding for bitter taste receptors (TAS2), the sweet and umami (TAS1), pheromone (VR1 or VR2) or mammalian olfactory receptors.

Conclusion

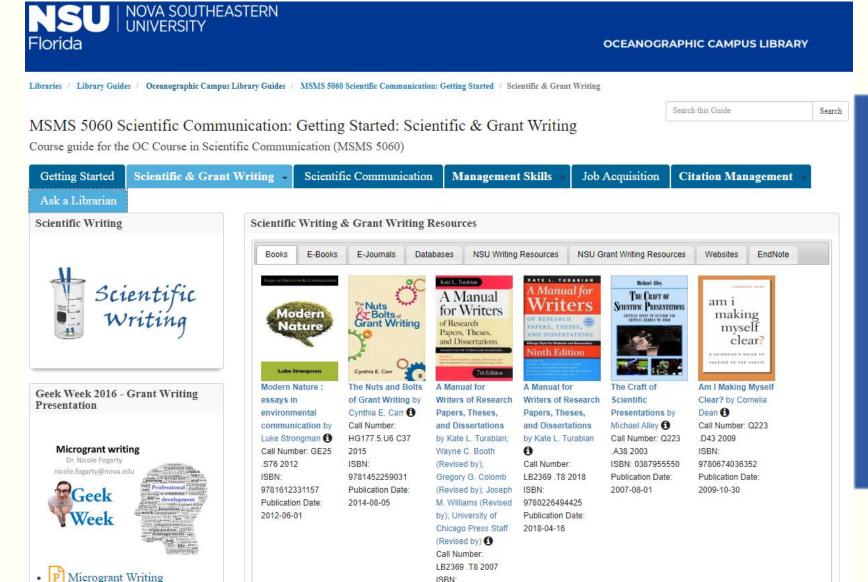
The amphioxus genome is remarkably rich in various GPCR subtypes while the main GPCR groups known to sense exogenous substances (such as Taste 2, mammalian olfactory, nematode chemosensory, quistatory, vomeronasal and odorant receptors) in other bilateral species are absent.

Dark matter RNA illuminates the puzzle of genome-wide association studies

In the past decade, numerous studies have made connections between sequence variants in human genomes and predisposition to complex diseases. However, most of these variants lie outside of the charted regions of thehuman genome whose function we understand; that is, the sequences that encode proteins. Consequently, the general concept of a mechanism that translates these variants into predisposition to diseases has been lacking, potentially calling into guestion the validity of these studies. Here we make a connection between the growing class of apparently functional RNAs that do not encode proteins and whose

Recommended textbook, but course readings articles!

Library Curated Content Example - Course Guide with Everything!

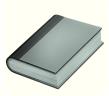


There is a required textbook for this course (which the library provides in print and e-formats) but there is also a lot of NSU and NSU Library ancillary content pulled into this course guide!

Libraries and Textbooks



Traditionally, academic libraries do not purchase textbooks for the library collection due to high cost, frequent revisions, and loss/damage.

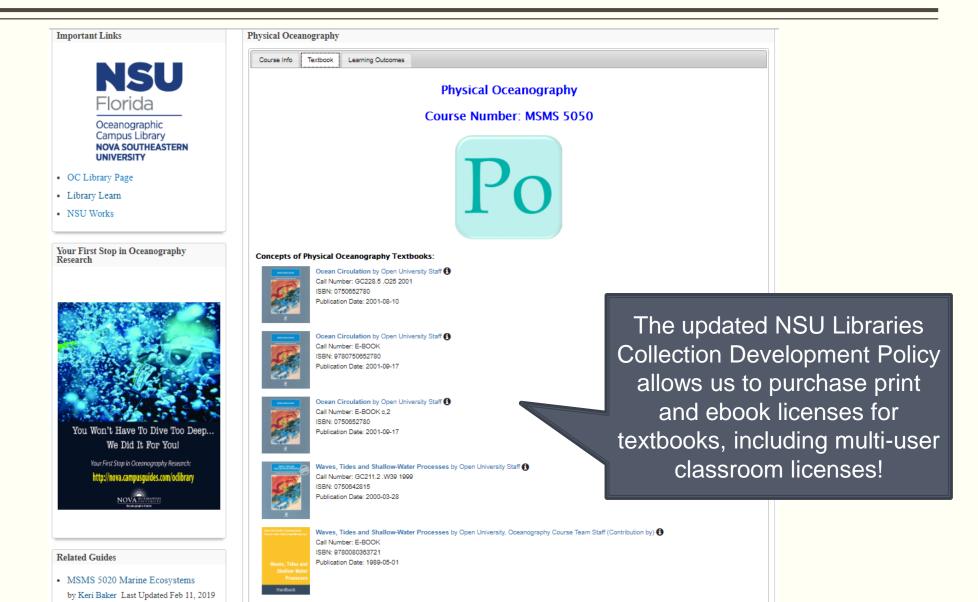


The newly adopted NSU Libraries Collection Development Policy allows the library to purchase textbooks for classes for checkout and reserve



NSU Libraries work closely with the NSU campus bookstore to evaluate a list of all textbooks for each upcoming term

NSU Libraries Support of Affordable/Free Textbooks for Students



Creating OER Content – What NSU Libraries Can Provide

Hosting

- Textbooks
- Journals
- ETDs
- Data
- Conferences
- Streaming Video & Audio
- Photographs
- Student Projects

OpenURL

 For linking to journal articles that are not open access so that you can access them via your institutional login or IP authenticated location



Barnes & Noble College - NSU Bookstore

First Day Opt-Out Model

- 100% of students have the right course materials on day one
- Offer pricing below competitive market rates
- Allows students to opt-out if they have to drop a class
- Addresses day one material issue

Flat-Fee Inclusive Course Materials

- Flat-fee for all materials billed as part of tuition bill each semester
- Treated as rentals that are returned at end of semester, with a buy-out option if students wish to retain their materials for their personal library
- Addresses textbook affordability issue

BNED Advanced OER Courseware (via LoudCloud)

- An innovative new offering that lowers the cost of learning materials for a full suite of introductory courses, and assures frictionless first day of class delivery.
- Using a combination of highquality, curated OER, original content created by faculty experts, and our state-of-theart technology platform LoudCloud, BNED Courseware is a complete, turnkey course ready to be implemented "as is" or easily personalized by any instructor.

An NSU Faculty Perspective

Awareness of OERs

• I was implementing OERs before I even knew what an OER was.

Types of OERs

- Instructor Created Videos
 - (Flipped Classroom)
- YouTube Videos
 - (Survey Research EC)
- Various Websites
 - (IUB Plagiarism Quiz)

IMPLEMENTING AN OER INITIATIVE AT NSU

Recommendations for an Institutional Adoption

Myths of OER



Recommendations for an OER initiative @ NSU

Incentivization

 Microgrants or other funding support (i.e. NSU PFRDG)

Support from library and faculty committees

- Group of experts that can provide resources and answer questions
- NSU Office of Copyright can address any copyright concerns through the NSU Copyright Officer, Stephen Carlisle, J.D.

Start small with ancillaries

- PowerPoints
- Audio/Videos

Partner with NSU Bookstore (Barnes & Noble)

- First Day Opt-Out Model
- Flat-Fee Inclusive Course Materials
- BNED Advanced OER Courseware (via LoudCloud)

Tips for Implementing OERs

Don't try to find everything in one place

Though there are companies that can help you do this (Lumen Learning)

Start small and don't try to do it all at once (one course; one module)

Cater to different learning styles

Join/develop a professional learning community

Ask for help!

Conclusion

Ultimately, it is the acceptance of OERs by faculty which will drive implementation efforts for the institution.

It is important to understand faculty perspectives on the OER adoption process as well as their views on integrating these resources into the curriculum.

Faculty who wish to integrate OERs should build relationships with their institution's librarians in order to reduce the time and effort to adopt the resources.

Librarians and library resources can be leveraged by faculty and other institutional stakeholders to ensure a successful OER implementation.

References

- 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 https://www.hewlett.org/wp-content/uploads/2016/08 /ReviewoftheOERMovement.pdf
- U.S. Bureau of Labor Statistics. (2018). Consumer price index All urban consumers: College textbooks. Retrieved from
- Wright, R. E. (2018). *OER adoption in higher education: A case study of stakeholders'* perceptions at a state college in Florida (Doctoral dissertation). Retrieved from ProQuest Dissertation and Thesis database (Accession No. 2172440420)

Questions?



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