

### OPEN, GET READY!

PUBLIC AND ACADEMIC LIBRARIES' SUPPORT FOR OPEN EDUCATION IN CANADA



### **Erik Christiansen**

Assistant Professor / Librarian Mount Royal University

Email: echristiansen@mtroyal.ca

Twitter: @eriksation

Phone/text: (403) 831-5146

Portfolio: erikchristiansen.net

Blog: tech-bytes.net



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## What we'll cover in this session

1. OER and the Open Education Movement

2. OER Policy in Western Canada

3. OER and the Public Library

4. Final Thoughts



1.
OER and the
Open Education
Movement



### Definitions of OER

### "Open Educational Resources" was coined at a 2002 UNESCO Conference

"The open provision of educational resources, enabled by information and communications technologies, for consultation, use and adaption by a community of users for non-commercial purposes."

### Definitions of OER

### OECD in <u>Giving Knowledge for Free</u> (2007)

"digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research."

### Definitions of OER

### OECD in <u>Giving Knowledge for Free</u> (2007)

Discusses several concepts around "openness" (p. 32-36)

- Covers technical, legal, social, and price barriers
- The right to modify and repurpose

Taken from McNally, M., & Christiansen, E. (2016, December 7). <u>Choices and consequences in transitioning from closed to open resources and courses</u>. Presented at the Open Education in Action Conference, Maskwacis Cultural College, Maskwacis, AB.

Lesson plans Games **Textbooks** Stock photography Video files 3D printing models Multimedia Quizzes and assessments **Guides and manuals** 

In other words, OER can be pretty much any digital object for teaching and learning...

The "5 Rs"

Retain

Reuse

Revise

Remix

Redistribute

## Benefits According to the Literature

#### Cost

 Materials such as textbooks, course packs, online assessment, etc

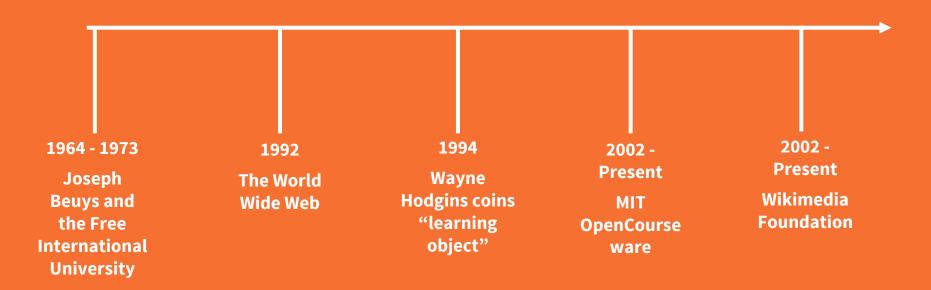
#### Access

- Broader public and life long learning
- Accessibility considerations
- Flexibility and digital formats

### Benefits to Teaching and Learning

- Customization
- Collaboration
- Student-driven learning

### **Open Education Timeline**



Taken from Christiansen, E. (2017, November 24). Everything is sharable: Why open educational resources are critical to lifelong and the sharing economy. Workshop given at the Code4Lib Alberta Conference, University of Alberta, Edmonton, AB.

### Broader Context

Open Education Movement



Modified from McNally, M. (2014). <u>Broadening Access o Knowledge: Considerations in Developing and Using Open Educational Resources (OER).</u>

# Interested Parties and Stakeholders

#### Librarians

Information literacy and student success

#### **Instructors**

Engaging students

#### Students / learners

- Cost sensitive
- Want flexible-learning

#### Post-secondary administration / leadership

Institutional sustainability and retention

### Government / policy makers

Cost of education to the public

### Gaps in OER Literature

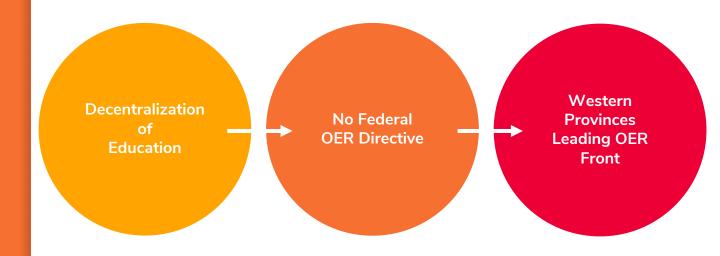
- Abundance of institutional case studies
- Emphasis on cost savings



# **2.**OER Policy in Western Canada



# Education Governance in Canada



### Research Questions

What is being done in Western Canada to advance OER?

• What are the focuses of OER policy at both the government and research university levels?

### Data being analyzed

Review and analysis of all relevant high-level policy documents from the four Western Provinces and policy from each provinces' respective research universities:

- Policy and strategic plans from ministries of Education
- Government funded OER initiatives / programs
- Government press releases
- Legislative debates (Hansard minutes)
- Campaigns and funding opportunities
- OER repositories (websites and missions)
- University strategic and academic plans
- Any other special reports from provinces or relevant institutions

### **150 Documents and Counting!**

Province		Date Access Re		esource Document title		e	Link	
Provin	ce Date	Date Accessed	Initiative / Organization	Resource Type	Page / Policy Title	Notes	URL	
BC	cc Date	Accessed 2016-12-18	BC Campus	Funding initiative	Online Program Development Fund	110103	https://bccampus.ca/online-program-development-fund-opdf/	
BC		Accessed 2016-12-18	BC Campus	Repository	Open Textbook Project		https://bccampus.ca/open-textbook-project/	
BC		Accessed 2016-12-18	BC Campus Annual Review		BCCampus Annual Review 2015-2016	Report contains information on many projects	https://bccampus.ca/files/2016/10/BCcampus-Annual-Review-2015-16-PDF.pdf	
ВС		Accessed 2016-12-18	BC Campus Education Technology Users Group	Webpage	About Us		https://etug.ca/about/	
BC		Accessed 2016-12-18	BC Campus Education Technology Users Group	Webpage	ETUG: visions, innovators, community of practice		https://etug.ca/2014/03/25/etug-visionaries-innovators-community-of-practice/	
ВС		Accessed 2016-12-18	BC Campus	Report	BCcampus Impact and Forecast Report 2013-2014		https://bccampus.ca/annual-report-2014/	
ВС	2013-09	Accessed 2016-12-18	BC Campus	Strategic Plan / Report	Annual Report 2012-2013 Strategic Plan 2013-2016	Combined document	https://bccampus.ca/files/2013/10/2013-ar-stratplan.pdf	
BC		Accessed 2016-12-18	BC Campus SOL*R	Strategic Plan	Strategic Plan 2012-2015		https://bccampus.ca/files/2013/10/strategicplan 2012 15.pdf	
BC		Accessed 2016-12-18	BC Campus SOL*R	Strategic Plan	Strategic Plan 2011-2014		https://bccampus.ca/files/2013/10/Strategic Plan 2011-2014.pdf	
BC		Accessed 2016-12-18	BC Campus SOL*R	Strategic Plan	Strategic Plan 2010-2012		https://www.bccampus.ca/files/2013/08/BCcampus StrategicPlan2010.pdf	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	About Solr		https://solr.bccampus.ca/wp/about-bccampus-shareable-online-learning-resources/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	Solr Background and History		https://solr.bccampus.ca/wp/about-bccampus-shareable-online-learning-resources/background-and-history/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	Solr Goals		https://solr.bccampus.ca/wp/about-bccampus-shareable-online-learning-resources/solr-goal/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	Value Proposition		https://solr.bccampus.ca/wp/about-bccampus-shareable-online-learning-resources/value-proposition/	
ВС		Accessed 2016-12-24	BC Campus SOL*R	Repository	Contribute a Resource	Includes potential user barriers	https://solr.bccampus.ca/wp/how-to/contribute-a-resource/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	Other Related Tasks	Includes potential user barriers	https://soir.bccampus.ca/wp/how-to/contribute-a-resource/other-related-tasks/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	Create Resources	Best practices and barriers	https://solr.bccampus.ca/wp/how-to/create-resources/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Repository	Best Practices	Best practices and barriers	https://solr.bccampus.ca/wp/best-practices/	
BC		Accessed 2016-12-24	BC Campus SOL*R	Wiki	Interoperability and Reusability Wiki	Best practices	https://mediawiki.bccampus.ca/index.php/SOLR:Main_Page	
ВС	2016-01-28 LM	Accessed 2016-12-24	BC Campus SOL*R	Wiki	General Best Practices for Creating Learning Resources	Best practices	https://mediawiki.bccampus.ca/index.php/SOLR:General Best Practices for Creating Learning Resources	
BC	2013-09-20	Accessed 2016-12-26	BC Campus	Blog post	Revisiting Campus 2020		https://bccampus.ca/2013/09/20/revisiting-campus-2020/	
BC	2007-04	Accessed 2016-12-26	BC Government	Report	Campus 2020 Thinking Ahead	Original report not found. Web archive	http://web.archive.org/web/20110609000240/http://www.aved.gov.bc.ca/campus2020/campus2020-thinkingahead-report.pdf	
BC	2014-04	Accessed 2016-12-26	BC Campus	Report	Student Services Surey Result	Discussion of OER	http://docs.openinfo.gov.bc.ca/d12200514a_response_package_aed-2013-00136.pd	
ВС	2012-10-16	Accessed 2016-12-26	BC Government	Blog post	BC to lead Canada in offering students free, open textbooks		https://news.gov.bc.ca/stories/bc-to-lead-canada-in-offering-students-free-open-textbooks	
BC	2015-05-29	Accessed 2016-12-26	BC Government	Press release	Open textbooks fill digital shelves		https://news.gov.bc.ca/stories/open-textbooks-fill-digital-shelves	
ВС	2014-04-15	Accessed 2016-12-26	BC Government	Press release	BC leading the discussion on open textbooks		https://news.gov.bc.ca/stories/bc-leading-the-discussion-on-open-textbooks	
BC	2015-03-06	Accessed 2016-12-26	BC Government	Press release	Open Education offers students and educators new learning experiences		https://archive.news.gov.bc.ca/releases/news_releases_2013-2017/2015AVED0021-000291.htm	
BC	2016-03-06	Accessed 2016-12-26	BC Government	Press release	Opeb textbooks: a great idea catches on		https://news.gov.bc.ca/stories/open-textbooks-a-great-idea-catches-on	
BC	2015-02	Accessed 2016-12-26	BC Ministry of Advanced Education	Report	2015/2016 - 2017/2018 Service Plan		http://www.bcbudget.gov.bc.ca/2015/sp/pdf/ministry/aved.pdf	

### Some early findings

- Disproportionate focus on cost savings
- Little discussion about how OER can improve teaching and learning and flexible delivery (with some exceptions)
- Little focus on creating incentives for instructors to create more OER
- BC Government and institutions are leading

### BC Open Textbook Project



Find an Open Textbook >

About »

Open Textbook Summit 2017

Pressbooks Support »

Resources »

Calls for Proposals »

Projects »

BC OpenEd Librarians »

Contact/Help »

STUDENTS | FACULTY

### **Find**

a Textbook

Find

Search our collection of open textbooks for a peerreviewed book in your discipline. Hundreds of B.C. Faculty are learning how to customize open textbooks that also save their students money. See the Resources and Contact dropdown links above for help. **FACULTY** 

### **Adopt**

a Textbook

Adopt

Let us know if you have adopted an open textbook.

Or, if you are looking for resources on how to adopt a textbook, we have some resources to help.

**FACULTY** 

### **Adapt**

a Textbook

Adapt

Take advantage of the open textbook Creative
Commons license and customize an open textbook to
fit your specific needs. See Support for Adapting an
Open Textbook for a list of resources to help you
modify an existing open textbook.

### BC Campus Hosts Many Open Textbooks

#### Introduction to Psychology

Good news! This book has been updated and revised. An adaptation of this book can be found here: open.bccampus.ca

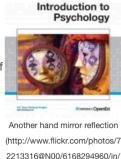
**Description**: This textbook includes learning objectives, key takeaways, exercises and critical thinking activities, and a marginal glossary of key terms. In short, I think that this book will provide a useful and productive synthesis between your goals and the goals of your students. I have tried to focus on the forest rather than the trees and to bring psychology to life—in ways that really matter—for the students. At the same time, the book maintains content and conceptual rigor, with a strong focus on the fundamental principles of empiricism and the scientific method. Zip file contains HTML version of the book.

Author: Charles Stangor

Original source: www.saylor.org/books, flatworldknowledge.lardbucket.org

Adoption (faculty): Contact us if you are using this textbook in your course

Adaptations: Support for adapting an open textbook

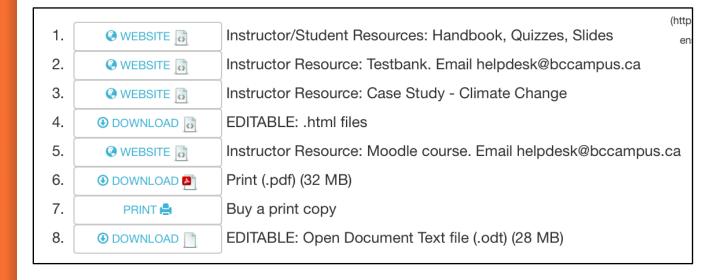


photostream/) by Frank Kovalchek

(http://www.flickr.com/photos/7

Screenshot Source 24

# BC Campus Hosts Many Open Textbooks



Screenshot Source 25

### Alberta OER Initiative



### Alberta OER Initiative

Funded projects across Alberta with a focus on reducing the cost of higher education to students

 Projected savings to students is over \$5 million (Alberta OER <u>ROI Cost Savings</u>)

#### Resources for instructors

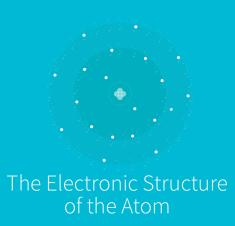
- Communications: <u>Starter Kit</u> and <u>Champions</u> <u>Toolkit</u>
- Webinars and videos

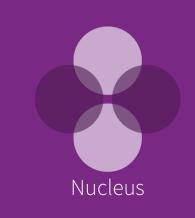
### Notable projects funded

- Open Physics site, Johnathan Sharp UofA
- Open Logic Project, Richard Zach, UofC

# **OPEN**PHYSICS

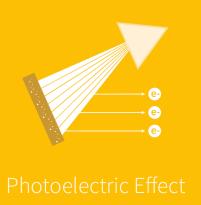








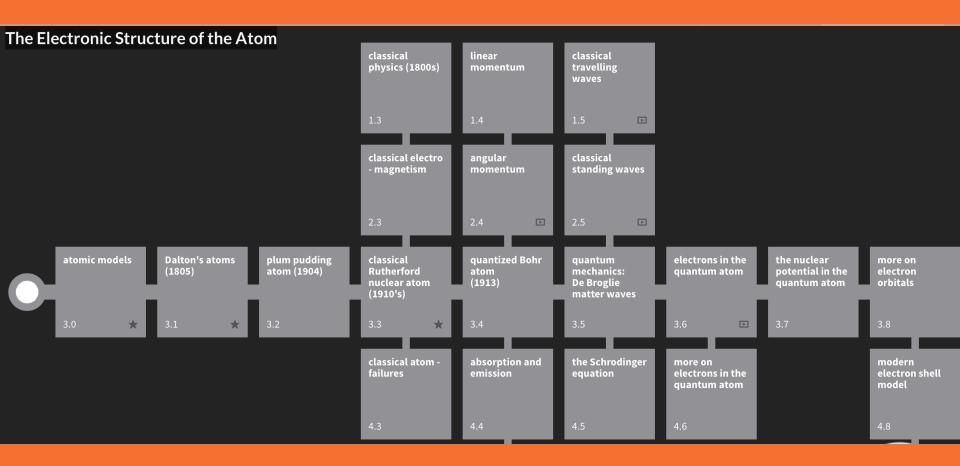












#### Dalton's Atoms (1805)





#### The idea of atoms

#### John Dalton's atomic theory:

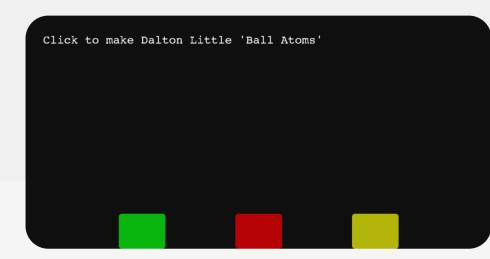
- 1. Pure elements consist of atoms
- 2. The atoms of a specific element are identical
- 3. Atoms cannot be sub-divided
- 4. Atoms of different elements differ in atomic weight
- 5. Atoms unite to form chemical compounds
- 6. Atoms cannot be created or destroyed by chemical reactions

In 1808 Dalton published A New System of Chemical Philosophy. He was also known for studying colour-blindness.

#### Limitations

Although Dalton's atomic theory helped build the foundation of our understanding in atoms, the majority of his points were later discovered to be wrong:

2. Isotopes are different versions of the same element. Although the same element must have the same number of protons, they can differ in number of neutrons. The same element can also differ in number of electrons, providing different charges.

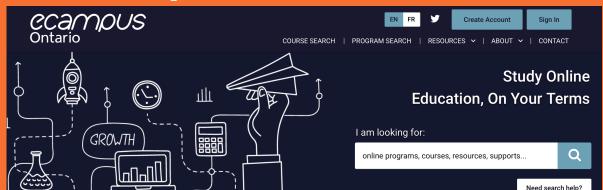


### Campus Manitoba



Source: <a href="http://www.campusmanitoba.ca">http://www.campusmanitoba.ca</a>

### eCampus Ontario



Source: https://www.ecampusontario.ca

OER Commons	Learning objects + textbooks	https://open.bccampus.ca/find-open-textbooks/
MIT Open CourseWare	Fully open courses	https://ocw.mit.edu/index.htm
Merlot II	Learning objects	https://www.merlot.org/merlot/index.htm
BCCampus Open Textbooks	Textbooks	https://open.bccampus.ca/find-open-textbooks/
Open Stax	Textbooks	https://openstax.org/
Open Data Canada	Data	http://open.canada.ca/en/open-data
Internet Archive	Multimedia / web archive	https://archive.org/
Open Source Software Directory	Open source software	https://opensourcesoftwaredirectory.com/

**3.**OER and the Public Library



# Benefits According to the Literature

#### Cost

 Materials such as textbooks, course pack, online assessment, etc

#### Access

- Broader public and life long learning
- Accessibility considerations
- Flexibility and digital formats

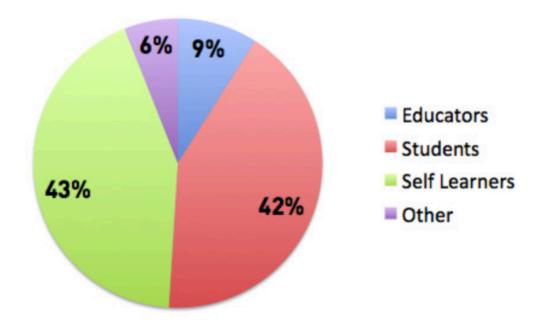
### Benefits to Teaching and Learning

- Customization
- Collaboration
- Student-driven learning

### MIT Open Courseware

Massachusetts Institute of Technology makes most of its course content available to the public

- Receives 2 million visits per month
- 2364 courses published



MIT OpenCourseWare. (2016, October). Retrieved from https://ocw.mit.edu/about/site-statistics/



# With a partner try and answer...

- 1. Are there patrons, or specific groups, that would benefit from OER in any way?
- 2. Can you think of an experience you had when you were trying to help a patron find some information where an OER might have been helpful

5 min!

# With a partner try and answer...

- 1. Are there patrons, or specific groups, that would benefit from OER in any way?
- 2. Can you think of an experience you had when you were trying to help a patron find some information where an OER might have been helpful

Find another pair of participants and trade stories

5 min!

## Participant feedback

Are there patrons, or specific groups, that would benefit from OER in any way?

- High school students
- Second language learners
- Internationally trained professionals
- People looking for a career or job change
- People looking to start their own business
- K-12 Teachers
- People with access barriers: in long-term care facilities, remote communities, seniors, etc
- Life-long learners
- Not-for-profit employees

## Participant feedback

Can you think of an experience you had when you were trying to help a patron find some information where an OER might have been helpful

- Looking for coding and robotics ideas lesson plans and tutorials – beyond what's provided by vendors
- Out of print items
- Accessing materials in a printable format
- Examples of in-depth reference questions. Ex. Effects of coal and black lung during period of years.
- Children in hospitals long-term and want to keep up with studies
- Homeschooling resources
- Materials accessible to all users second language learners, different age groups, different cultural contexts, etc
- Oral history

STREET STREET, STREET,

4.

Final Thoughts

## OER Challenges

- General awareness
- Flexibility and customization
- Quality assurance



## Allen and Seaman, 2014

"The most significant barrier to wider adoption of OER remains a faculty perception of the time and effort required to find and evaluate it"

(Allen and Seaman, <u>2014</u>, <u>Opening the Curriculum</u>)

# Instructor Workload Comparison

Closed course	Fully open course
Content expert (has read foundational materials)  Course content (syllabi, notes, assignments, PowerPoint)  Design and deliver content for one audience  Competence using the library and its resources and services	All elements from closed courses, plus:  •Course readings need to be open access •Design for variety of audiences • Language • Cultural considerations •Knowledge of open licensing options • Permissive licensing (CC-BY or CCO) •Dissemination methods • OER / institutional repositories •Pedagogical changes • Self-assessment • Sophistication / reading level •Usability / accessibility • Multiple file formats • Editable files with instructions • Open source editing tools provided (or recommended)

Taken from McNally, M., & Christiansen, E. (2016, December 7). <u>Choices and consequences in transitioning from closed to open resources and courses</u>. Presented at the Open Education in Action Conference, Maskwacis Cultural College, Maskwacis, AB.

# Using OER in the Public Library

15% of Canadians don't have / use Internet (ITU, 2014)

- Public libraries are digital hubs for many community users
- Linking to OER from library's search is critical



**CCO Image** 

# Using OER in the Public Library

#### Resources for Second Language Learners

- "<u>Listening, Speaking, and Pronunciation</u>" MIT Open Courseware
- "Writing for Success" Open Textbook Library
- "Business English for Success" OER Commons



## Using OER in the Public Library

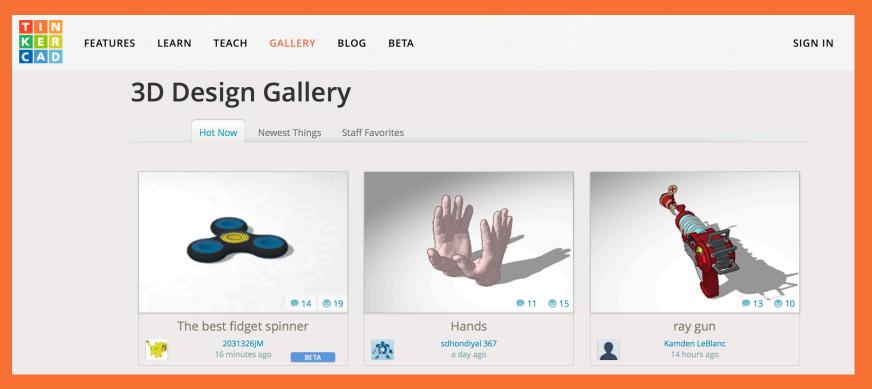
#### **OER** and the Maker Movement

- 3D printing and 3D scanning build on open design templates and open source software
- Robotics lesson plans
- Teaching computer programming and STEM



### **TinkerCAD** - Design software

- Cloud-based
- Users can create design export them for 3D printing



## Using OER in the Public Library

Partnering with local organizations to host open education events



And if you still don't believe OER are important...

We all start somewhere!





# Questions for you

- 1. Are there particular resources / guides not covered in this presentation that you would like to learn more about?
- 2. Where would you like to see a paper on OER and the role of the public library published?

## Questions?

### **Erik Christiansen**

Assistant Professor / Librarian Mount Royal University

Email: echristiansen@mtroyal.ca

Twitter: @eriksation

Phone/text: (403) 831-5146

Portfolio: erikchristiansen.net

Blog: tech-bytes.net



#### References

Alberta OER. (2017). "ROI Cost Savings." <a href="http://albertaoer.com/sites/albertaoer.com/files/ABOER-Cost-Savings-CC-BY-NC.pdf">http://albertaoer.com/sites/albertaoer.com/files/ABOER-Cost-Savings-CC-BY-NC.pdf</a>

Allen, I. E., and J. Seaman. (2014). "Opening the Curriculum: Open Educational Resources in U.S. Higher Education, 2014." Babson Survey Research Group. <a href="http://www.onlinelearningsurvey.com/reports/openingthecurriculum2014.pdf">http://www.onlinelearningsurvey.com/reports/openingthecurriculum2014.pdf</a>.

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International Telecommunications Union (ITU). 2014. "Percentage of Individuals Using the Internet." <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>

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Lumen Learning. (2015). What are open educational resources? Retrieved from http://lumenlearning.com/about-oer/

McNally, M. (2014). <u>Broadening Access o Knowledge: Considerations in Developing and Using Open Educational Resources (OER).</u>

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http://www.oecd.org/edu/ceri/givingknowledgeforfreetheemergenceofopeneducationalresources.htm

Smith, P. and T. J. Ragan. 2005. Instructional Design. 3rd Ed. Hoboken, NJ: Wiley.

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