

Oregon State University Ecampus

Measuring Success: An Introduction to Affordability Metrics

OLC Collaborate
February 7, 2020



Measuring Success: An Introduction to Affordability Metrics

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Open Educational Resources at Oregon State

open.oregonstate.edu

Link to slides

<https://tinyurl.com/OLCOER>



Link to handout

<https://tinyurl.com/OLCOERhandout>



COUP Framework

<https://openedgroup.org/coup>

Measuring Success: Our Agenda

1. **Cost** - Student savings (or cost avoidance)
2. **Outcomes** - Student success
3. **Usage** - Leveraging affordances of open licenses
4. **Perceptions** - Other ways of measuring impact

Bonus: Teamwork!

1. Student savings (or cost avoidance)

Practices vs Best Practices

Keep in mind:

- Data is **squishy**, so be transparent and consistent when reporting savings.
- Build **relationships** with the people that manage existing data sources.
- Saving money has a big **impact** on students, regardless of the method used to calculate the amount.

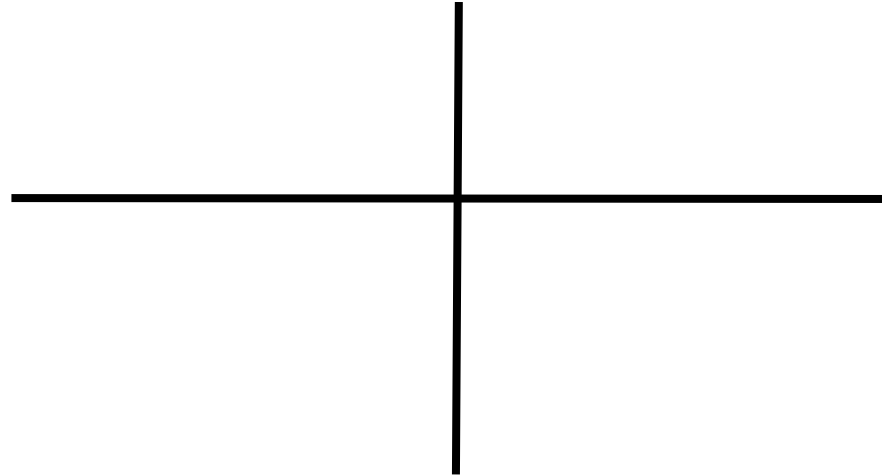
Collecting Data

$$[\# \text{ of students}] \times [\$ \text{ saved}] = [\text{savings estimate}]$$



Use no-cost/low-cost
schedule designation
data to track savings

Basic: Use
\$100 savings
estimate



Maximum
potential: Find
out retail cost
of last used
commercial
textbook

Maintain a
separate list
of courses
with known
savings



Basic: Use
\$100 savings
estimate
(<http://openoregon.org/is-the-average-cost-of-a-textbook-100/>)

Maximum
potential: Find
out retail cost
of last used
commercial
textbook

Basic vs Maximum Potential Savings Estimate

Basic	Maximum Potential
Emphasizes that #s are an estimate, an average, not exact	Shows differences between disciplines
Estimate accounts for affordability efforts at bookstores (used, rentals, etc), as well as student behavior (sharing, selling back, etc)	Highlights dollar amounts of retail prices, face value of what the syllabus asks
No need to gather textbook cost data	Extra effort needed to collect this data

Use no-cost/low-cost
schedule designation
data to track savings



Maintain a
separate list
of courses
with known
savings

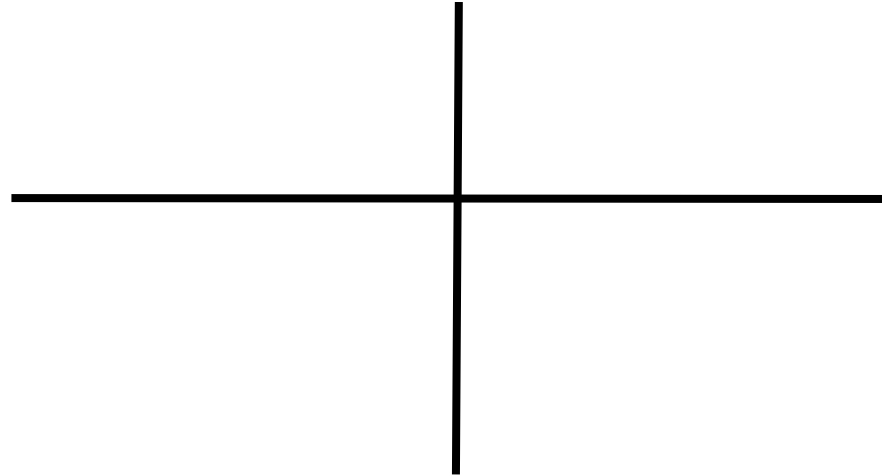
Schedule Designation vs Separate List of Courses

Schedule designation	Separate list
Maintain one list of no-cost/low-cost courses	Track all student savings, even where costs don't meet no-cost/low-cost criteria OR track only OER savings
Importance of outreach to faculty in reporting adoptions	Accounts for lack of confidence in designated course data
Single data source	Multiple data sources - eg bookstore data, OER grant program data, etc.



Use no-cost/low-cost
schedule designation
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Basic: Use
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Maintain a
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What additional questions might come up?

- How many hours at minimum wage does your savings number represent?
- Cost of textbooks per credit?
- Is there general awareness about on-time adoption reporting?
- Does the bookstore contribute to the general fund?
- Are faculty saving students money under the radar of your program?
- Which disciplines are seeing success in reducing costs for students?
- Which successes might be replicated somewhere else?
- What do students consider to be low-cost?
- At what point is savings data less useful than outcomes data? (What will you do after you hit your savings goal?)
- Etc...

2. Outcomes

Student Success

- Students' **academic performance**
- Change in **course throughput rates**
- Students' **enrollment intensity**

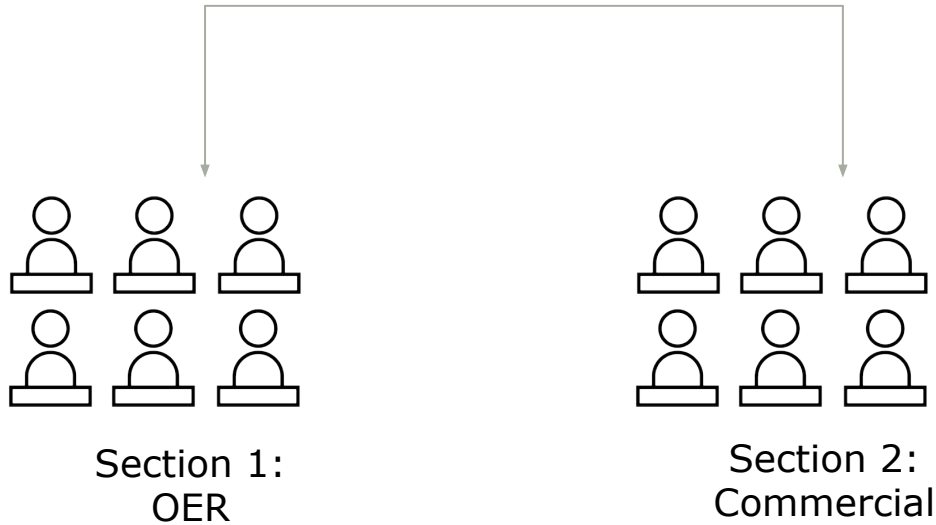
Keep in mind:

“Educational research is particularly messy”

- Guidebook to Research on Open Educational Resources Adoption

- Many variables
- Inconsistent data sources
- Statistical analysis will be needed

Academic performance

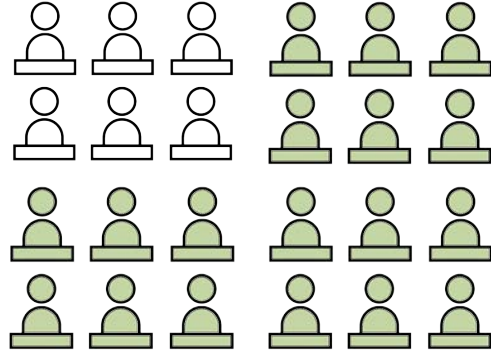


Course throughput rates: Measuring change

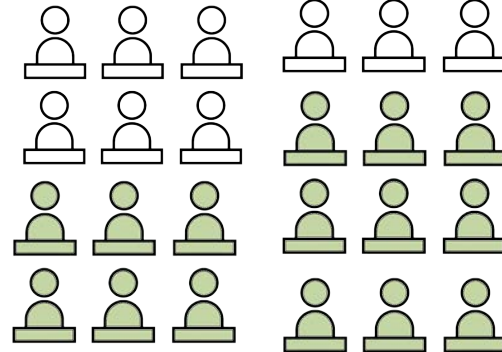
- **Rates of completion**
- **Drop rates (DFWI)**
- **Percentage of students receiving a C or better**
- **Enrollment intensity**

Course throughput:

Changes in rates of completion



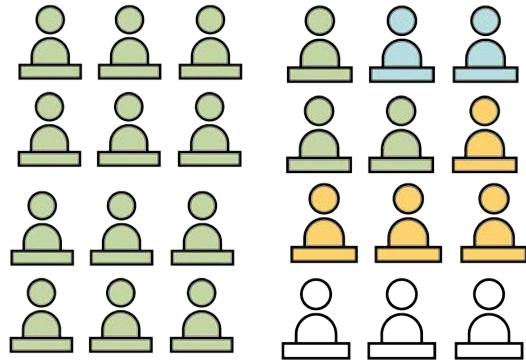
OER



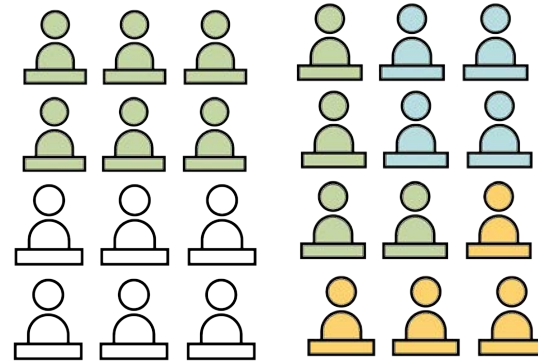
Commercial

Course throughput:

Changes in DFW



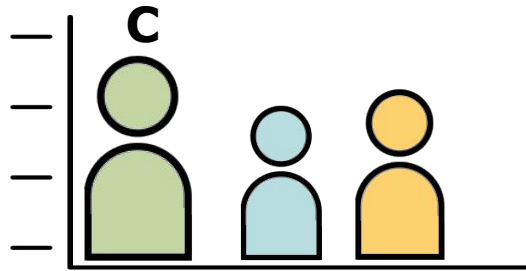
OER



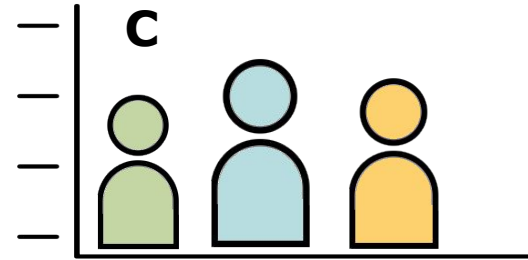
Commercial

Course throughput:

Percentage of students receiving a C or better

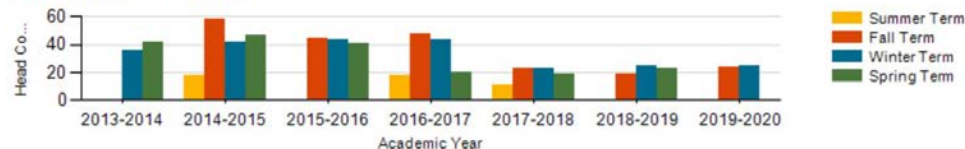


OER

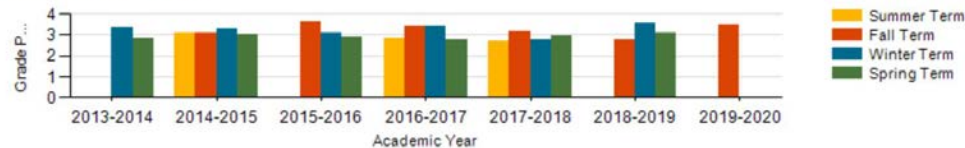


Commercial

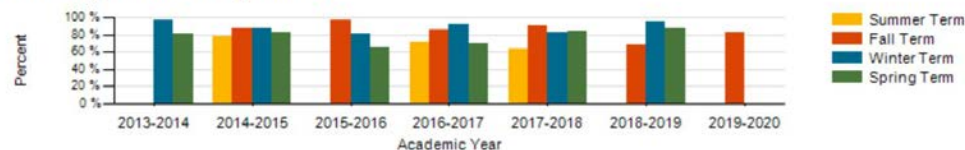
Enrollment Headcount - WR323



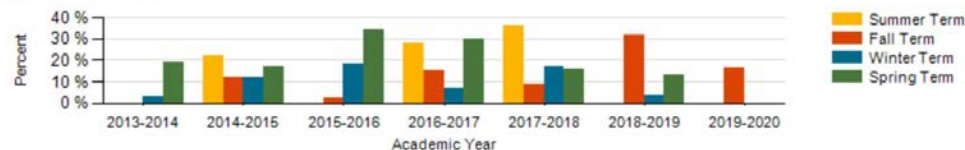
Average Grade - WR323



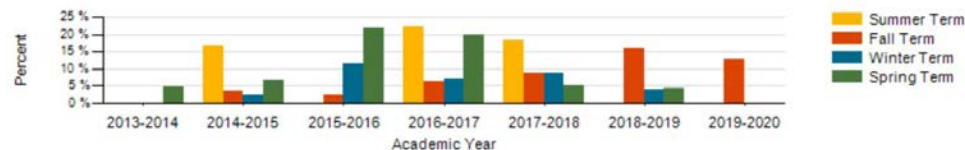
Pass Rate (C- or above or S) - WR323



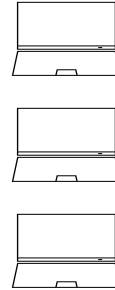
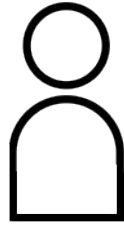
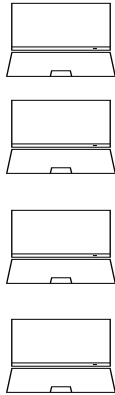
DFWU Rate - WR323



Withdraw Rate - WR323

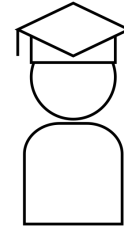


Enrollment intensity



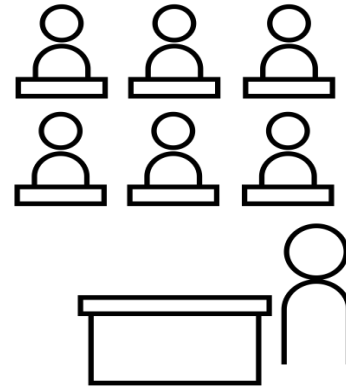
Longitudinal

- Changes in **persistence**
- Changes in **attainment of progress** milestones
- Changes in **graduation rates**

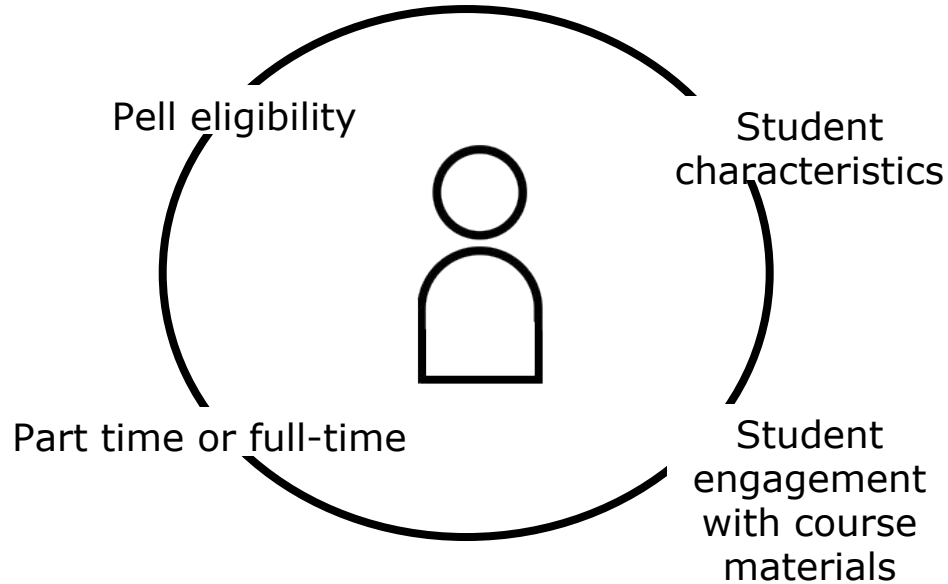


Variable and confounders

- **Course Redesign**
- **Same/Different Instructor**



Variable and confounders



Variable and confounders

Modality: Online, F2F, Hybrid

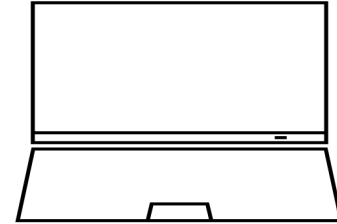
Content: Textbook vs other course materials

Format: Print or digital

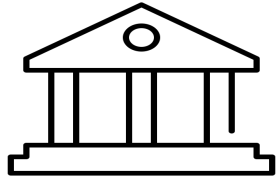
Time of year: semester or quarter, spring, fall

Discipline: STEM, humanities, social sciences

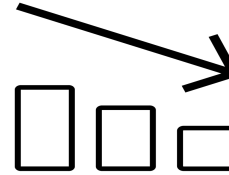
Instructor: Part time or full time



What the research tells us so far



Federal Assistance



Withdrawal rate

Tools and resources

OER Adoption Impact Calculator

<http://impact.lumenlearning.com/>

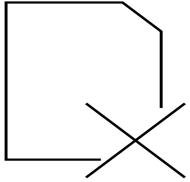
3. Usage

Leveraging affordances of open licenses

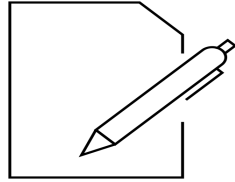
Usage

- How **faculty remix and reuse open content.**
- How **students use the OER.**
- How students and teachers utilize the **additional legal freedoms** that OER provides

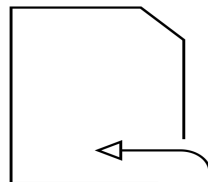
Usage by faculty



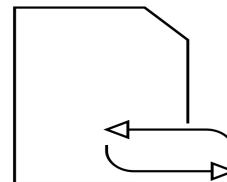
Delete



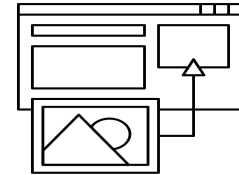
Edit



Insert

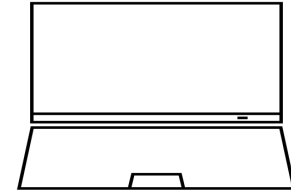
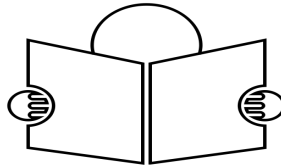
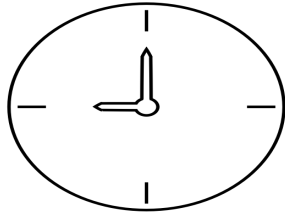


Move

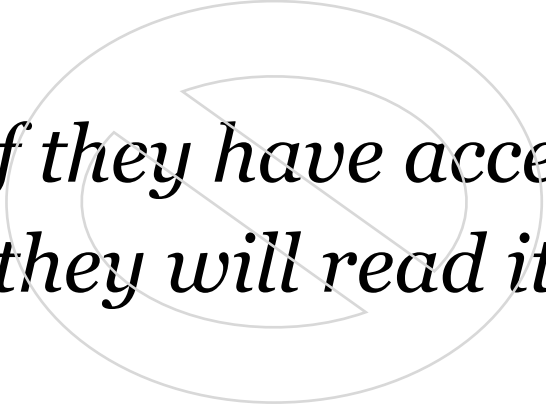


LMS Integration

Usage by students



Usage: “the access problem”



*“If they have access,
they will read it”*

Tools used by researchers

- **TAUS** - Textbook Assessment and Usage Scale (*Gurung & Martin, 2011*)
- **Teacher Behaviors Checklist** (*Keely, Smith & Buskist, 2006*)
- **Study Behavior Checklist**–(*Gurung, Weidert, & Jeske, 2010*)
- **Shortened Experiences of Teaching and Learning Questionnaire** (*Tait, Entwistle, & McCune, 1998*)

4. Perception

Other ways of measuring impact

Other kinds of perception

- **Affective** - my instructor cared enough to make custom/free course materials
- **Quality beyond peer review**: accessibility, equity, cultural relevance, diverse perspectives, secure student data, flexibility in student purchasing and format options
- **Open vs free** - who cares?

Catalyzing other kinds of change

- My students don't do their reading anyway/are we training students to read online sources?
- Schedule designation requirement surfaces workflow and timing issues with adoption reporting
- Efforts towards fully open pathways leads to conversations about academic freedom, student experience towards completion

Statewide or systemwide considerations:

- Aggregating data when it is tailored to local needs
- Audience includes state agencies, legislators
- Time

Bonus: Teamwork!

Textbook Affordability Plan (HB2213)

- Office of the Registrar
- Bookstore
- Faculty Senate
- Student Government
- Library
- Academic Success
- Information Services
- Academic Technologies

- DAS
- Printing & Mailing
- General Council
- Center for Teaching and Learning
- Curriculum Council
- Institutional Research
- And so on....



OPEN EDUCATION GROUP

Socially responsive research that concretely improves society



Rebus COMMUNITY

Amy Hofer

hofer@linnbenton.edu

@open_oregon

Stefanie Buck

stefanie.buck@oregonstate.edu



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