Measuring Success: An Introduction to Affordability Metrics

OLC Collaborate
February 7, 2020
Measuring Success: An Introduction to Affordability Metrics
Open Educational Resources at Oregon State

open.oregonstate.education
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

[# of students] x [$ saved] = [savings estimate]
Basic: Use $100 savings estimate

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

Maintain a separate list of courses with known savings

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

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

<table>
<thead>
<tr>
<th>Schedule designation</th>
<th>Separate list</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain one list of no-cost/low-cost courses</td>
<td>Track all student savings, even where costs don’t meet no-cost/low-cost criteria OR track only OER savings</td>
</tr>
<tr>
<td>Importance of outreach to faculty in reporting adoptions</td>
<td>Accounts for lack of confidence in designated course data</td>
</tr>
<tr>
<td>Single data source</td>
<td>Multiple data sources - eg bookstore data, OER grant program data, etc.</td>
</tr>
</tbody>
</table>
Basic: Use $100 savings estimate

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

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

Maintain a separate list of courses with known savings
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

Section 1: OER

Section 2: Commercial
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 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

- Pell eligibility
- Student characteristics
- Part time or full-time
- Student engagement with course materials
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
Amy Hofer
hofera@linnbenton.edu
@open_oregon

Stefanie Buck
stefanie.buck@oregonstate.edu
Image credits

- Back by vectoriconset10 from the Noun Project
- Chart by Vladimir Belochkin from the Noun Project
- Clock by vectoriconset10 from the Noun Project
- CMS module by Danil Polshin from the Noun Project
- Down chart by Ilaria Bernareggi from the Noun Project
- Edit by vectoriconset10 from the Noun Project
- Error by vectoriconset10 from the Noun Project
- Government by romzicon from the Noun Project
- Laptop by vectoriconset10 from the Noun Project
- People by vectoriconset10 from the Noun Project
- Shuffle by vectoriconset10 from the Noun Project
- Students by vectoriconset10 from the Noun Project
- Student by vectoriconset10 from the Noun Project
- Studying by vectoriconset10 from the Noun Project
- Teach by vectoriconset10 from the Noun Project

Images from the Noun Project are licensed under a CC BY Creative Common license 3.0