Textbook affordability at UCF: A Report of research Using the COUP Framework and Practical Tips on Working with Faculty

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Textbook affordability at UCF: A report of research using the COUP Framework AND practical tips on working with faculty

Penny Beile and Sandy Avila
2019 ACRL Conference
Cleveland, OH
Textbook Affordability Efforts at UCF
Textbook Affordability Efforts at UCF

- Print reserves
- Library ebooks
- Open Educational Resources
- Affordability Counts
- First Day Access
Part 1: Impact of an OER adoption on student outcomes and behaviors in an American History course

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Textbooks cost.... sometimes a lot. The problem and the promise.
The problem:
Textbook costs have doubled over the past 20 years, even controlling for a 55% inflation rate. As a result, some publishers have effectively priced textbooks out of the market for many students.

2016 UCF student survey results, n=1,975, and local surveys

% of students indicating that, due to textbook costs, they “frequently” or “occasionally”:

• 83% delayed purchase
• 53% did not buy the textbook
• 21% did not register for a specific course
• 20% took fewer courses in general
• 19% earned poor grade due to not buying textbook

The promise of affordable textbooks

- Higher GPA
- Increased retention
- Greater satisfaction
- Increased enrollment intensity
- Reduced time to graduation
- Decreased student debt


https://link.springer.com/article/10.1007%2Fs12528-015-9101-x
Study Rationale

- Explore effectiveness
- You get what you pay for
- Make informed adjustments
- Add to research on History adoptions
- Empirical evidence, institutional context, credibility
- OpenEd fellowship project
The COUP Framework for Evaluating OER was used to structure the analysis:

C: Cost  
O: Outcomes  
U: Usage  
P: Perception

Mixed-methods approach using analysis of quantitative data (pre/post adoption comparisons on academic performance) and qualitative data (focus group, survey responses)

COUP Framework, Open Education Group, http://openedgroup.org/coup
Cost

“Provides empirical evidence about the magnitude and direction of the financial impacts of OER adoption:

- Costs of textbooks previously assigned
- OER support fee models
- Changes in campus bookstore revenue
- Changes in tuition revenue due to changes in drop rates or changes in enrollment intensity or persistence
- Changes in access to performance-based funding due to changes in drop, enrollment intensity, and persistence”
Findings: Since adoption, this instructor has taught 16 sections, reaching 1,633 students, saving them $130,000.

Method: Cost savings are calculated based on the number of student enrollments and the new cost of the traditional text ($80), tracked since semester of adoption, Summer 2016.
Also explored how Cost impacted student behaviors

**Method:** Survey (multiple selections allowed), followed by focus group.

<table>
<thead>
<tr>
<th>N=832</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>177</td>
<td>21.2</td>
</tr>
<tr>
<td>Housing</td>
<td>160</td>
<td>19.2</td>
</tr>
<tr>
<td>Additional education</td>
<td>133</td>
<td>15.9</td>
</tr>
</tbody>
</table>
Hierarchy of School Needs

- Textbooks
- Food
- Housing
- Tuition and fees
Outcomes

“The Outcomes strand of our work provides empirical evidence about the magnitude and direction of the learning impacts of OER adoption:

- Changes in the percentage of students receiving a C or better (course GPA)
- Changes in rates of completion
- Changes in drop rates / persistence
- Changes in enrollment intensity
- Changes in attainment of progress milestones (e.g., first 15 credits)
- Changes in graduation rates”
## Outcomes, continued

<table>
<thead>
<tr>
<th></th>
<th>Pre-OER Adoption</th>
<th>Post-OER Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Dropped during Drop/Add period</td>
<td>54</td>
<td>10.4</td>
</tr>
<tr>
<td>Drop/fail/withdraw rate</td>
<td>23</td>
<td>4.5</td>
</tr>
<tr>
<td>Pass rate</td>
<td>440</td>
<td>85.1</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>
## Outcomes, continued

<table>
<thead>
<tr>
<th></th>
<th>Pre-OER Adoption</th>
<th></th>
<th>Post-OER Adoption</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Course GPA</td>
<td>494</td>
<td>2.85</td>
<td>1.1</td>
<td>418</td>
</tr>
</tbody>
</table>
If the average college student spends approximately $1000 per year on textbooks and yet performs scholastically no better than the student who utilizes free OER, what exactly is being purchased with that $1000?

- John Hilton (2016)
Usage

“The Usage strand of our work provides empirical evidence about the ways faculty and students use OER:

- Deleting materials from the OER
- Inserting other open material inside the OER
- Moving materials around in the OER
- Editing material in the OER

How did students report using the OER

How easy was it to acquire and use
<table>
<thead>
<tr>
<th></th>
<th>N=283</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to acquire</td>
<td></td>
<td>255</td>
<td>90.1%</td>
</tr>
<tr>
<td>Easy to read</td>
<td></td>
<td>243</td>
<td>85.9%</td>
</tr>
<tr>
<td>Easy to use</td>
<td></td>
<td>236</td>
<td>83.4%</td>
</tr>
<tr>
<td>Easy to study from</td>
<td></td>
<td>203</td>
<td>71.7%</td>
</tr>
</tbody>
</table>
Perceptions

“The Perceptions strand of our work provides empirical answers to these questions:

What do faculty and students think about, and feel toward, OER?

How do they judge their effectiveness relative to traditional textbooks? Their rigor and coverage?

Do they find the formats, structures, and other design features easy to use? Frustrating?”
## Perceptions, continued

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree/agree</th>
<th>Neither agree or disagree</th>
<th>Disagree/Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credible</strong></td>
<td>83.7%, n=237</td>
<td>12.4%, n=35</td>
<td>3.9%, n=11</td>
</tr>
<tr>
<td><strong>Relevant to course</strong></td>
<td>79.2%, n=224</td>
<td>11.3%, n=32</td>
<td>9.5%, n=27</td>
</tr>
<tr>
<td><strong>Supported performance</strong></td>
<td>66.4%, n=188</td>
<td>17.7%, n=50</td>
<td>15.9%, n=45</td>
</tr>
</tbody>
</table>
Of those who had an opinion, \textit{86\% of students thought the quality of free educational materials was the same or better} when compared to traditional materials.
Implications

- **Program improvement** – able to address instructional design issues
- **Collaboration** - Instructional designers, librarians, faculty, faculty development center, institutional effectiveness
- **Increased visibility** – outcomes did not significantly differ, but more adoptions
- **Additional support** – librarian position funded by Provost to facilitate additional adoptions
- **Request by AVP for more research** – plans to ‘tag’ courses that have zero cost instructional materials, run analyses across all sections tracked
Part 2: Promotion and Adoption of Textbook Affordability and Affordable Course Materials: Forensic Science

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Print Reserves

• Implemented in Fall 2018

• From 25 high DFW/GEP* courses 15,000 items checked across 432 sections

• Target was high cost & high enrollment course sections

• Library Director approved funding of $10,000 to purchase materials

How many items do you think we were able to purchase?

*Drop Fail Withdraw/General Education Program
57

all print

1 book for every 100 students
Library eBooks

- Library sourced materials
- GOBI accounts provided to interested faculty working with a subject librarian
- Looking for DRM free, unlimited seats as an eBook available for purchase
- Case study targets the Forensic Science Program- Chemistry Department at UCF
Step 1: Establishing an “In”
- Develop the relationship
- Build trust
- Attend a faculty meeting

Step 2: Why it Matters
- Sharing library initiatives- textbook affordability
- Posturing against wider institutional goals
- Make it personal to their students

Step 3: The Quick Turnaround
- Don’t lose momentum
- Work through details of course syllabus & required items
- Present slate of suitable options

Step 4: Working the Back and Forth
- Stay in constant communication
- Get feedback and do something with it as soon as possible
- Seal the deal and capture statistics (including monetary savings)
Total Cost Savings for the Introduction to Forensic Science Course

- 226 students (enrollment cap)
- Course taught every Fall semester
- Original course text cost $171

TOTAL savings in 1 course = $38,646

Library Sourced Material cost= $518.31
Thank you!

Slide deck is available at http://ucf.academia.edu/PennyBeile

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