

# Affordable Course Materials: Impact on Student Learning

Eric Resnis • Coastal Carolina University • eresnis@coastal.edu  
 Jennifer Bazeley • Miami University • bazelejw@miamioh.edu

## The OER Adopt/Adapt Grant Program

The OER Adopt/Adapt/Create grant program provides professional development funds for Miami University faculty, with an aim to garner interest in OER and implementation in classrooms.

The three tiers of the program are below. When faculty participate in the Adopt phase, they agree to an assessment of student learning in the course before the OER is implemented and after.

**OER - Explore:** Participate in a two-hour overview workshop; review an Open Educational Resource for possible use in a course; and publish review online.

**OER - Adopt:** Identify, adopt and evaluate an Open Educational Resource in a course.

**OER - Create:** Focus on evaluating the need for an Open Educational Resource in a course and then receive support to develop, use and assess it. This program is being piloted this academic year.

## Small Group Instructional Diagnosis (SGID)

The Small-Group Instructional Diagnosis (SGID) is a formative procedure to assess students' perceptions of the effectiveness of instruction in a course. It has been utilized as a method of teaching effectiveness at Miami for over a decade.

The SGID was chosen for this assessment as it is a well-accepted and valued assessment method for faculty members. Furthermore, students are used to SGID conversations happening in the classroom.

The prompts for the OER SGID closely mirror those of a traditional SGID, with some prompts focusing more on the class text and learning resources rather than pedagogical methods.

Traditionally, SGIDs occur at the midpoint of a semester. For this project, the SGID occurs in the final third of the semester to ensure that there has been plenty of time to use the traditional or open text before assessment occurs.

## SGID Process

1. SGID Facilitator and Faculty member meet to discuss process, mutual goals, and process. Prompts modified if needed. Dates scheduled for SGID.

### In-person

2. Facilitator visits at the beginning of class for ~30 minute exercise. Faculty member is not in room. Students work in groups to answer prompts.

3. Facilitator walks through prompts, generating broad themes that are discussed more in-depth.

4. Facilitator generates report that captures conversation and broad themes. Facilitator and faculty member discuss report.

### Online

2. Prompts are provided to students in an online form. Students have one week to answer prompts.

3. After one-week, themes are generated from the initial survey. Students are then provided an additional survey to indicate agreement with the broad themes.



## Data Collection

Over 3 semesters (Spring 2017 to Spring 2018), SGIDs were conducted for the following courses, including pre and post open-text implementation:

- (1) English composition course for international students
- (1) Study skills course for international students
- (6) Psychology intro survey courses -- 2 online
- (1) Electrical Engineering major course
- (1) Family Science major course

## Conversation Highlights (and Lowlights)

"I appreciate that after lecture, the textbook is updated to include what we have discussed, and that example problems are sometimes reformulated to include classroom learning."

"Using the new online book isn't easy."

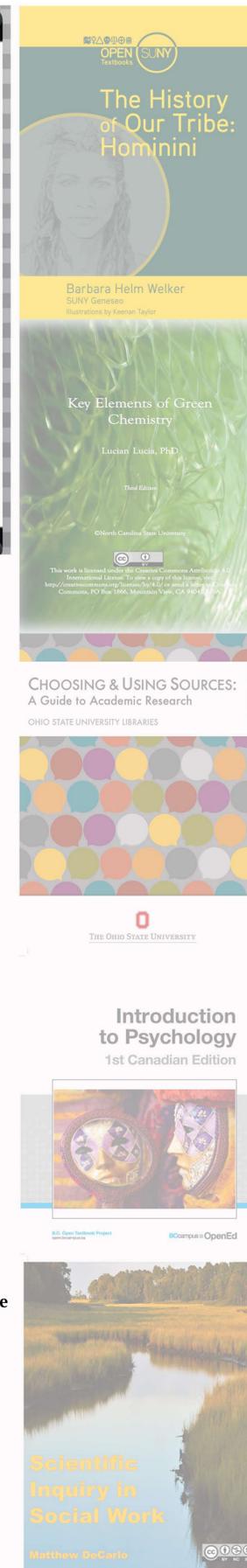
"We love the lack of an expensive textbook. A cheap print alternative for the new book would be helpful."

"All we need to succeed in this class is the powerpoint slides."

"\$225 for two tangential resources [the required texts] is inconsiderate."

"It would be helpful if the professor made this an optional text."

"We would like the textbook or alternative resources made available on reserve."



## Results (so far)

Transitioning from a traditional text to an open text appears to have little impact on perceptions of student learning:

--Positive and negative perceptions of instructor and classroom quality do not deviate greatly.

--Most deviations in quality were due to lack of support for using the new open text.

--While the nature of instructor feedback is different between in-person and online courses, the feedback regarding OER is not that different (note: low *n* for online courses)

Broader themes became apparent:

--When classroom pedagogy and classroom activities do not need the textbook, it does not matter if the text is open or not.

--Many incorrect assumptions are made about student ability to utilize online and open textbooks.

--The most successful use of OER is when the text changes and adapts to in-class (and lab) interactions.

## Possible Questions For Future Inquiry

Is there an impact to learning in humanities or natural sciences courses?

While large survey courses are easy targets for cost savings, should an OER adopt/adapt program focus on major and upper-level courses?

Are textbooks needed for courses where primarily 'spoon-feeding' pedagogical methods are used?

Are there true differences when an OER is implemented in the online environment?

Can the implementation of OER be used to increase student learning by using diverse pedagogical methods and/or the reframing of course material?