

# Affordable Learning Georgia Textbook Transformation Grants

## Final Report

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Grant Number: 114

Institution Name(s): The University of Georgia

Team Members (Name, Title, Department, Institutions if different, and email address for each):

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- Brian Dotts, Clinical Associate Professor – Educational Theory and Practice. [bdotts@uga.edu](mailto:bdotts@uga.edu)
- James Castle, Instructional Designer – Office of Online Learning. [jcastle@uga.edu](mailto:jcastle@uga.edu)
- James Gurney, Graduate Teaching Assistant – Educational Theory and Practice (Spring 2015 only)

Project Lead: Deanna Cozart

Course Name(s) and Course Numbers:

- EDUC 2110 (Critical and Contemporary Issues in Education)
- EDUC 2120 (Exploring Socio-cultural Perspectives on Diversity)

Semester Project Began: Spring 2015

Semester(s) of Implementation: Spring 2016

Average Number of Students Per Course Section: 90 (EDUC 2110 only)

Number of Course Sections Affected by Implementation: 1

Total Number of Students Affected by Implementation: 89

## 1. Narrative

A. This textbook transformation began as a way to decrease the additional costs faced by education majors (i.e. ethics exam, liability insurance, edTPA, online portfolio access, etc.). Initially, we were excited to undertake this project because it allowed us to eliminate textbook costs associated with EDUC 2110 (Critical and Contemporary Issues in Education) and EDUC 2120 (Exploring Socio-cultural Perspectives on Diversity). As both of these courses are required for initial teacher certification in the state of Georgia, hundreds of students pass through these courses each academic year, and we knew this type of transformation could have a substantial impact on our education students.

In a Round 1 project that concluded in Spring 2015, Dr. Cozart used a compilation of free and online reading materials. However, student feedback indicated that they appreciated the free aspect of the learning materials, but about 20% would have strongly preferred a textbook in addition to the compilation. Thus, for this project, Dr. Cozart and Dr. Dotts undertook creating free, open textbook content associated with EDUC 2110 and EDUC 2120. The project also included compiling readings for the courses and course activities to accompany the new authored content.

One of the greatest challenges associated with the project was determining a platform to host the new materials. Unfortunately, there are not very many options for hosting new OER material, and what does currently exist can be difficult to use. We found none of the preexisting options would allow for the level of customization needed for the project, which meant we worked with our instructional designer to create a new site. While this option worked and met the needs of this project, it required a high level of instructional design support, which would be difficult to replicate at other institutions or even for other courses here at UGA.

In terms of an advantage, eliminating a textbook and moving to all curated readings and custom authored content has been very freeing for instruction. We are no longer bound to the content and perspective of a singular textbook, which means we have the flexibility to mold the course to our learning objectives in a more specific way. This change is not lost on students either, as many offered comments about how much they appreciate the diversity in perspective and reading multiple voices.

The student response is another strength of this project; students are overwhelmingly positive regarding their experiences not having a traditionally published textbook. The most common themes were they appreciate the cost savings, customizability/diversity of viewpoints, and ease of access (online versus a traditional hard copy textbook).

B. Given the associated challenges we encountered with developing our own hosting platform for the new materials, we would highly recommend using an existing option for

any future development. The code writing and development on the new site really went above and beyond the scope of this initial project. While not perfect, using our university WordPress installation or even OpenStax's CNX platform may have been better options in hindsight.

Another challenge to the project were changes in the project team and their roles within UGA. We lost one graduate student from the initial proposal in May 2015, the department head who sponsored the initial project retired in June 2015, an instructional designer originally assigned to the project in July 2015, and Dr. Cozart moved to a non-instructional role in August 2015. While the loss of the graduate student and instructional designer were frustrating, they did not significantly impact the project. However, Dr. Cozart's new position meant that her EDUC 2120 courses were absorbed by others within the department who were not necessarily on board with using the newly created materials. Thus, it would be helpful in the future to recruit and develop broader department support for the materials to encourage their use by new and existing faculty. At present, the materials for EDUC 2120 have been created, but not utilized.

One of the wider challenges associated with OER and adoption of OER for courses are questions surrounding quality of the materials. Though Dr. Dotts and Dr. Cozart feel they created high quality materials, there was not time or infrastructure to support a peer review of the newly-created materials. It would be exceedingly helpful in the future if there were a way to integrate faculty at different institutions around Georgia, where these are required courses are all taught according to a set of competencies approved by the Board of Regents. This would not only help students by broadly sharing resources more freely, but also assisting with concerns of quality that can plague more widespread implementation and use.

## 2. Quotes

- *"I loved having the free readings!! I liked having a diverse selection. And, I do struggle to pay for school, so any dollar saved is a big positive for me."*
- *"I felt that the free online materials were just as, if not more, beneficial as a regular textbook would have been. It was wonderful not having to worry about paying tons of money for a book and still having great materials to read. It was much more convenient, and I wish more of my classes used this method."*
- *"I really enjoyed having access to free, online readings because it was better for me financially and helped me to do just as well in the class."*

### 3. Quantitative and Qualitative Measures

#### 3a. Overall Measurements

##### Student Opinion of Materials

**Was the overall student opinion about the materials used in the course positive, neutral, or negative?**

Total number of students affected in this project: 90 enrolled, 85 completed surveys

- Positive: 49 % (41 students) of 84 number of respondents
- Neutral: 43 % (36 students) of 84 number of respondents
- Negative: 8 % (7 students) of 84 number of respondents
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##### Student Learning Outcomes and Grades

**Was the overall comparative impact on student performance in terms of learning outcomes and grades in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

Choose One:

- Positive: Higher performance outcomes measured over previous semester(s)
- Neutral: Same performance outcomes over previous semester(s)
- Negative: Lower performance outcomes over previous semester(s)

##### Student Drop/Fail/Withdraw (DFW) Rates

**Was the overall comparative impact on Drop/Fail/Withdraw (DFW) rates in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

**Drop/Fail/Withdraw Rate:**

2.2% (2 total) of students, out of a total 90 students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Choose One:

- Positive: This is a lower percentage of students with D/F/W than previous semester(s)
- Neutral: This is the same percentage of students with D/F/W than previous semester(s)
- Negative: This is a higher percentage of students with D/F/W than previous semester(s) (\*Note, this is slightly higher during the semester of implementation where 2 students withdrew as opposed to 1 student across Fall 2015 sections. This

IS NOT a statistically significant difference, so I would be cautious in interpreting too much from this single metric.)

### **3b. Narrative**

#### *Quantitative Analyses*

The newly created Open EDUC materials were implemented in one large course section (n = 87) of EDUC 2110 in Spring 2016. Students were given the opportunity to submit survey responses about the materials, including quantitative, Likert-type items and open-ended, qualitative items regarding their experiences and perceptions of quality with the new materials. These results were compared to responses in an identical survey administered to Fall 2015 EDUC 2110 (n = 103) students who used a traditional textbook, *American Education*, by Joel Spring. Results from surveys were compared across groups, as were failure and withdrawal rates, and final grade distributions.

In terms of course withdrawals, 104 students began the course in Fall 2015, and one student withdrew. For Spring 2016, 89 students began the course, and two students withdrew. While this is an increase, it is neither practically or statistically significant. Given that this is a required course for teacher certification in the state of Georgia, most students who begin the course, complete it, as they must pass it to continue in their program of study. Thus, while using an OER over a traditional textbook was likely helpful, it does not appear to have had significant bearing on student remaining the course.

Another important consideration in this project is how students actually performed once the course changed from the primary learning material being a traditional textbook to an OER. In terms of grade distributions, 102 students out of 103 who completed the course in Fall 2015 received a C or better (99%), while 87 students out of 87 students who completed the course in Spring 2016 received a grade of C or better (100%). This was not a statistically significant change, as a Chi-square analysis resulted in  $p = .82$ . Though there was not a statistically significant change in course performance, it is still important to consider that students did not perform *worse* in the course without a traditional textbook. This further bolsters the evidence that students can receive cost savings by using an OER without sacrificing course performance.

Students across semesters were asked to rate their learning materials, both a traditional textbook and an OER, according to perceived quality compared to other learning materials they have used. For the Fall 2015 students who used a traditional published textbook, 92 out of 101 (91%) reported the perceived quality to be about the same, higher, or much higher than other texts they have used. Spring 2016 students who used the OER were also positive about the quality of their learning materials; 77 out of 84

(92%) respondents reported perceived quality about the same or higher than a traditional published text.

While student perceptions of quality were similar for the different learning materials, perhaps a more interesting measure was on a question which read, *“Imagine a future course you are required to complete. If the same instructor offers two different sections of this course during equally desirable time slots, but one section uses free digital textbooks and the other uses traditional published textbooks, which section would you prefer to enroll in?”* For students using the traditional textbook, 28 said they would prefer the class with the traditional textbook, 57 would prefer the section with free, online materials, and 18 said they would have no preference. Interestingly, the distribution changed significantly for students already using free, online materials. For those students, only 6 reported they would choose a section with a traditional textbook, 64 indicated they would choose the section with the free, online materials, while 13 would have no preference. This represents a change from 55% selecting free, online materials to 77%, a statistically significant change ( $\chi^2 (2, N= 186) = 13.452, p < .001$ ) between groups. This offers an interesting perspective in how students’ perceptions of OER and other free, online materials may become more positive once they have effectively used them within a course.

### *Qualitative Analyses*

In addition to quantitative survey items, students were also asked an open-ended survey item about their feedback on the use of either the textbook or the free, online materials. These responses were qualitatively coded to look for common themes across responses.

Students in the fall who used a traditional textbook were asked, *“What is your favorite and least favorite thing about the textbook?”* The majority of favorable responses were focused on the textbook being easy to read, interesting, and helpful for class, which many other students felt the text was too long with too much content, unnecessary for class, and expensive. A summary of these findings is included in Table 1 below.

Table 1. Student Feedback Themes on Original Course Textbook

Theme	Number of Responses	Percentage of Respondents
Least Favorite Responses	67	
Textbook too long	13	19.40%
Textbook included too much content	12	17.91%
Textbook unnecessary for class	11	16.42%
Textbook too expensive	10	14.93%
Most Favorite Responses	73	
Easy to read	17	23.23%
Interesting	12	16.44%
Helpful	8	10.96%
Related to class	6	8.23%

Students in the spring who used the online learning materials were asked, “Please provide feedback on your use and evaluation of the online learning materials.” 50 students provided feedback to this question. Unsurprisingly, the vast majority of students said the best thing about the materials is that they were free, followed by students who appreciated the convenience. Other students found the materials thorough and relevant or good overall resources. There was still a small subset of students (5 out of 50 responses) who indicated they would have preferred a traditional textbook. These findings are also summarized in Table 2.

Table 2. Student Feedback Themes on Online Reading Materials

Theme	Number of Responses	Percentage of Respondents
Cost savings	21	42.00%
Convenience	15	30.00%
Thorough and relevant	6	12.00%
Good resources	6	12.00%
Would have preferred a traditional textbook	5	10.00%

#### 4. Sustainability Plan

Our EDUC 2110/2120 website will continually be updated with course materials including but not limited to readings, videos, links, and other such content as needed. The website is flexible and can accommodate materials supported by faculty teaching these respective subject areas.

## 5. Future Plans

Relying on a website to host course materials has triggered by sensitivity to the availability of materials on the Internet, and has increased our interest in and opportunities for additional online creation. This includes video- and audio-taped lectures/discussions, interactive presentations, etc. Additionally, we will continue to act as advocates to other faculty to pursue no-cost and open options for their courses as well. OER will certainly be a top consideration for any future courses taught by Dr. Dotts and Dr. Cozart

In terms of sharing our experiences and ideas on this project, we have already presented on this specific project in two sessions at the University System of Georgia Teaching and Learning Conference in April 2016. Dr. Cozart has also had a book chapter accepted for publication detailing this project and the results on student perceptions and outcomes. We also anticipate sharing our final data here in future presentations in the remainder of 2016 and into 2017.

## 6. Description of Photograph

**Team Photo:** (left – right) James Castle, Instructional Designer; Dr. Deanna Cozart, Coordinator of Open Educational Resources; Dr. Brian Dotts, Clinical Associate Professor

\*Please note an additional photo of Dr. Dotts with his students who utilized the new materials is included in the zipped content also submitted with the final report.