**Affordable Learning Georgia Textbook Transformation Grants**

**Final Report**

**Round 4, Proposal 151**

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**and Dr. Scott Jacques, Georgia State University**

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**Institution Name(s):** Clayton State University (CSU) and Georgia State University (GSU)

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**Project Lead:** Andrea Allen (CSU)

**Course Name(s) and Course Numbers:** CSU—Research Methods (SOCI 4501); GSU—Research Methods & Policy Evaluation (CRJU 4501)

**Semester Project Began:** Fall 2015

**Semester(s) of Implementation:** Fall 2016

**Average Number of Students Per Course Section:** 25 (CSU); 35 (GSU)

**Number of Course Sections Affected by Implementation:** 3

**Total Number of Students Affected by Implementation:** 82

**1. NARRATIVE**

**Transformation Experience**

Our experience with the textbook transformation was positive. We enjoyed the challenge of finding alternative materials to the traditional textbook for Research Methods. The major difficulty we faced was finding no-cost materials that complied with copyright laws.

We were only able to identify one general research methods textbook that was free for use: “Social Science Research: Principles, Methods, and Practices”, by Anol Bhattacherjee (2012). This book is made free to anyone at <http://tinyurl.com/9dml8fh>. Also, we identified a research methods textbook geared toward criminal justice students: “Introduction to Criminal Justice Research: An Applied Approach (3rd edition)” by Vito, Kunselman, and Tewksbury (2014). This book is available to USG students through Galileo.

Neither book amounted to our ideal textbook. Rather, they suffered from problems such as excessive jargon; material that is redundant or not streamlined; unnecessary information. However, the books are useful in that they cover all of the material we had planned to teach based on results of our content analysis of topics typically covered in research methods textbooks. Therefore, we used these textbooks as reference sources, rather than “teaching to the textbooks.” In practice, that involved, one, developing a streamlined course organization based on our content analysis (see Sample Course Outline); two, developing concomitant learning objectives and lectures; three, making indexes for each of the aforementioned textbooks that pinpoint which parts of each is relevant to particular aspects of the course material and, thus, should be referenced during those respective portions of the course. By using two free textbooks in that way, students had access to three perspectives on research methods, namely that of Bhattacherjee, Vito and colleagues, and ourselves.

**Transformative Impacts on Our Instruction**

This grant has transformed our instruction by encouraging us to “think outside the box” in topic coverage and the books we used for the course. This process has shown us that you do not have to teach with and to a textbook. Moreover, a course’s content may be improved by not doing so. We used the data from the aforementioned content analysis to outline and produce a comprehensive yet elegant version of course material, rather than rely on the eccentricities of a particular textbook. However, textbooks can be useful, so we also were pushed to locate and index free textbooks so that students could use them as reference sources to further understand course material.

**Transformative Impacts on Students and Their Performance**

The transformation positively impacted our students and their performance in several ways. The following summarizes findings detailed in the “Supporting Data & Related Documents” file: Compared to sections of research methods offered prior to the transformation, students at CSU in the ALG version of the course had a higher pass rate, a lower withdrawal rate, a lower failure rate (see Figure 1), and higher minimum grade (see Figure 3); there was no change among GSU students in those outcomes (see Figures 2 and 4), except that one student withdrew in the post-transformation version but none did in the pre-transformation version (see Figure 2). At CSU and GSU, students demonstrated improved knowledge of the learning objectives over the course of the semester (see Tables 1 and 2). At CSU and GSU, students in the pre- and post-transformation versions of the course had effectively the same mean, median, and highest maximum grade (see Figures 3 and 4). It is important to keep in mind, of course, that though students did not improve in every outcome, they stayed “stable” without investing a hundred or more dollars on a research methods textbook. On that note, the students had quite favorable views of the no-cost materials (see Table 3 and associated qualitative statements). All things considered, then, the transformation was rational and will be implemented in future sections of the course.

**Lessons Learned**

In addition to the “transformative impacts on our instruction,” perhaps the major lesson learned that we would act on next time is how to make better use of Galileo to find no-cost learning materials. Prior to the transformation, we were aware of how Galileo may be used to gain free access to articles, but late into the transformation we also learned that it provides free e-access to many books, including textbooks. We will use this lesson when prepping courses in the future to minimize, if not eliminate, the costs of books for students.

**2. QUOTES**

Overall, students from both CSU and GSU positively evaluated the no-cost learning materials. An exhaustive list of comments are found in the “Supporting Data & Related Documents” file, but the following quotes are illustrative of the themes contained therein:

“It was convenient and affordable. I’m broke and would not have been able to afford a textbook anyways.” (CSU student)

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“It’s free. Sometimes easier to find information than a regular textbook.”

 (CSU student)

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“It is available to me from any computer. I can look at it on computer, tablet, or phone.” (CSU student)

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“The ability to access a textbook from almost anywhere without the cost and carrying the weight of a traditional textbook.” (GSU student)

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“It was convenient. I use my laptop most of the time and having an online textbook made it easier.” (GSU student)

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“Free. My money did not go to waste.” (GSU student)

While most students viewed the no-cost materials positively, a few expressed the preference for a traditional textbook. One reason is due to the perception that a traditional textbook can be highlighted, whereas a digital textbook cannot. A GSU student, for instance, remarked, “I am not a big fan of digital textbooks. I would much rather a traditional textbook to highlight material needed,” and a CSU student commented that, “I could not highlight key points, because I did not have a physical textbook.” However, we do know that PDFs can be highlighted, so in the future we will show students how to do so. A second reason that some students preferred the traditional textbook over the digital is that the former did not lead to eye strain, whereas the latter did. One student stated that “[t]oo much online reading strains my eyes, so needed to print some sections to read later” (CSU student). Another said, “Staring at the screen too long is strenuous for my eyes” (GSU student). A third reason students disliked the digital textbook relates to technology: One CSU student said, “[you] had to have technology readily available”, whereas others said, “[It is] dependent on wifi which can fail” (CSU student) and “[you] can be distracted by [the] internet” (CSU student).

**3. QUANTITATIVE AND QUALITATIVE MEASURES**

**3A. OVERALL MEASUREMENTS**

The total number of students affected in this project is **82**: CSU: 50, GSU: 32.

Overall, students had a positive opinion of the materials used in the course, as evidenced by findings from a survey administered at the end of the semester; the questions and results are found in the “Supporting Data & Related Documents” file. Quantitative Results appear in Table 3, with qualitative results found on the pages thereafter.

**Students’ Perceptions of and Experiences with No-Cost Materials**

We ascertained students’ perceptions of and experiences with no-cost materials by administering a survey to students at the end of the semester. The instrument contains both quantitative and qualitative measures. Quantitative data were obtained by asking students about their agreement with the statements, “Textbooks are too expensive”; “I have a small budget for books”; “Course content should be free”. Responses were operationalized on a 5-point Likert scale from “Strongly agree” to “Strongly disagree.” Also, students were also asked to select whether they prefer a Digital Textbook (=1) or a Traditional Textbook for the course (=0). Qualitative data were obtained by asking students three open-ended questions: “What did you like about the Digital Textbook?”; “What did you dislike about the Digital Textbook?’; and “Is there any way you wanted to use the textbook but couldn’t because it is digital?” As noted above, results from this survey are found in Table 3 and the subsequent pages of the “Supporting Data & Related Documents” file.

**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:

* \_X\_ 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)

**Drop/Fail/Withdraw Rate:**

\_\_\_3.5\_\_\_\_% of students, out of a total \_\_82\_\_\_\_\_ students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Choose One:

* \_X\_\_ 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)

**3b. NARRATIVE**

**Drop, Fail, Withdraw (DFW) Delta Rates**

The DFW data are found in the “Supporting Data & Related Documents” file. Unfortunately, we were unable to obtain drop data. Thus, our analysis is of pass, fail, and withdrawals pre- and post-transformation. At CSU, overall the percent of fails and withdrawals dropped post-transformation, and the percentage of students who passed increased from pre-transformation semesters (see Figure 1). At GSU, the percentage of pass, fail, and withdrawals did not change from pre- to post-transformation, save the one student who withdrew from the post-transformation course due to the inability to pay tuition (see Figure 2).

**Student Success in Learning Objectives**

With assistance from our centers for instructional development/innovation, we developed new course learning objectives based on each lecture. The new course objectives are as follows: (1) Explain the nature of science; (2) Explain the purpose of research (science, originality, good study); (3) Describe ethics (including IRB); (4) Describe sampling; (5) Explain the data collection process; (6) Describe the analysis of data. To gauge student success in these learning objectives, we developed a short quiz that students completed the first and last days of class; a copy appears in the “Supporting Data & Related Documents” file. We compared their responses across these two time points. Results appear in Tables 1 and 2 of the aforementioned file. Data are presented as percentage of incorrect answers by question, and percent change from beginning to end of the semester. Overall, findings show that students improved their knowledge of the course material over the semester, thereby achieving the course’s learning objectives. For a few questions, however, the percentage of incorrect scores had a very small increase. We will discuss with each other whether this is a consequence of our course design and thus calling for change therein.

**Co-Factors**

We are not aware of any unique co-factors, for better or worse, that arose during the semester and thereby might have influenced the outcomes.

**4. SUSTAINABILITY PLAN**

As individual instructors, we will offer this no-cost-to-student option in future course sections of Research Methods. Additionally, we will encourage other instructors teaching this course to adopt our course design and materials. Next semester, for instance, a colleague of Andrea Allen’s at CSU is adopting this course’s materials for use in her Research Methods courses (undergraduate and graduate).

To maintain – and improve – course materials, we will continue to monitor ALG’s website, GALILEO, and OER platforms for new and updated no-cost materials useful to our courses. Any changes to course materials will continue to be based on student feedback and our own evaluations of “what worked.”

**5. FUTURE PLANS**

This grant has provided us the opportunity and platform to explore no-cost ways of delivering course materials in lieu of traditional textbooks. Further, this grant has shown us that with a bit of creativity and access to open resources, we can adopt no-cost materials in our other courses. As noted above in describing lessons learned, a positive outcome of this transformation was learning Galileo provides free e-access to many books, including textbooks. We will use this lesson when prepping courses in the future to minimize, if not eliminate, the costs of books for students. For example, Dr. Allen has found free e-books on Galileo that she will use in a course she is prepping at the graduate level, “Juvenile Justice.” Also, Dr. Jacques intends to do the same when he revamps his online course, “Social Science and the American Crime Problem,” which has hundreds of students each semester.

In our field of criminology and criminal justice, staples of the curriculum include Research Methods and Introduction to Criminal Justice. This coming semester (spring 2017), we are offering a no-cost materials version of Introduction to Criminal Justice. We mention this because after delivering that course, and possibly after delivering a no-cost materials version of Criminology (another staple), we intend to write an article about our experience and submit it to the *Journal of Criminal Justice Education*. We believe others in our field will be interested to learn about the possibilities of reducing the cost of textbooks without hurting, and possibly while enhancing, course material and related outcomes.

**6. DESCRIPTION OF PHOTOGRAPH**

(left to right) Dr. Andrea Allen, Clayton State University, PI and instructor of record; Dr. Scott Jacques, Georgia State University, Co-PI and instructor of record