

Affordable Learning Georgia Textbook Transformation Grants

Final Report

Instructions:

A. Your final report submission must include four separate component files:

1. Completed report form. Please complete per inline instructions. The italicized text is provided for your assistance; please delete the italicized text before submitting your report.
2. Syllabus, organized chronologically (day and/or week and unit), with links to materials as used per assignment. For each resource, give the title, author, Creative Commons licenses (if appropriate), and freely accessible URL to the material. Include all open-access links to all adopted, adapted, and newly created course materials.
3. Supporting data on the impact of your Textbook Transformation (survey, analyzed data collected, etc.)
4. A photograph of your team and/or your students for use in ALG website and materials.
 - a. Photograph must be 800x600 pixels at minimum (length x height).
 - b. Photograph must be taken together: individual team member photographs and website headshots not accepted.

B. Go to http://affordablelearninggeorgia.org/site/final_report_submission to submit these four components of your final report. Follow the instructions on the webpage for uploading your documents. You will receive a confirmation email. Based on receipt of this report, ALG will process the final payment for your grant. ALG may follow up with additional questions or to request your participation in a publication, presentation, or other event.

Date:

Grant Number: proposal 122

Institution Name(s): Valdosta State University

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

Joshua Reece, Assistant Professor of Biology, jreece@valdosta.edu

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Emily Cantonwine, Professor of Biology, egcantonwine@valdosta.edu

John Elder, Professor of Biology, jfelder@valdosta.edu

Project Lead: Joshua Reece

Course Name(s) and Course Numbers: Principles of Biology I BIOL 1107K

Semester Project Began: Summer 2015

Semester(s) of Implementation: Fall 2015

Average Number of Students Per Course Section: 25

Number of Course Sections Affected by Implementation: 14

Total Number of Students Affected by Implementation: 298

1. Narrative

A. Describe the key outcomes, whether positive, negative, or interesting, of your project. Include:

The key outcomes of our project include the successful implementation of a free textbook and generation of lecture and assessment materials for the new text. Our DFW rates are the same or lower than previous years, and student performance on assessments was unchanged or slightly improved over previous years, all at a huge cost savings to students. Our experience in this transformation was positive, and we are pleased with the new textbook. This project impacted my instruction by demonstrating that free texts and the use of primary literature is no different than or even better than forcing students to purchase for-profit texts. Students greatly appreciated the availability of the text, and they enjoyed reading about real-world examples of application of knowledge from the primary literature.

B. Describe lessons learned, including any things you would do differently next time.

We learned that standardizing materials across sections is not necessary to ensure similar performance. We used identical texts and PowerPoints across different sections, but the materials was taught in different order by each instructor, with little to no difference in student performance. We were perhaps expecting that our innovations would substantially reduce DFW rates, but that is unrealistic for introductory “weed-out” courses in the sciences. High DFW rates are universal, and perhaps necessary for these types of courses.

2. Quotes

“The free textbook was a HUGE help, thanks Dr. Reece!”

“I enjoyed being able to access the book on my ipad, computer, or printed versions.”

“The textbook was free, which was nice, but I still wanted to see more application like the papers we read.”

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: 298

- Positive: 82 % of 284 number of respondents
- Neutral: 14 % of 284 number of respondents
- Negative: 4 % of 284 number of respondents

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?

The impact on student performance was positive, with a slight decrease in DFW rates, and an increase in student performance on end of year assessment exams.

Student outcomes should be described in detail in Section 3b.

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?

Slightly positive

Drop/Fail/Withdraw Rate:

44% of students, out of a total 298 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)

3b. Narrative

DFW rate was 44%.

Average GPA was 71% C

Pre-transformation DFW rate was 65%

Student success in learning objectives measured as performance on end of year assessment, including 74% average on assessment, an improvement over previous years.

4. Sustainability Plan

All future instructors of this course will be able to choose the OpenStax textbook and make sure of lecture and assessment tools generated as a part of this grant.

5. Future Plans

I am convinced that for-profit textbooks can be avoided in all of my classes. I also plan on presenting this work at upcoming pedagogical conferences, although I have not yet identified specific meetings.

6. Description of Photograph

Emily Cantonwine, left, and Joshua Reece, right. Dr. Cantonwine and Dr. Reece were the two instructors who implemented our textbook transformation grant.