

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. *Course Outline document with links to the materials as used per day, week, or unit, organized chronologically. [View Course Outline Example](#)*
 - a. *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: 14 December 2016

Grant Number: 165

Institution Name(s): Valdosta State University

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

Joshua Reece, no longer employed at VSU

Gretchen Bielmyer, no longer employed at VSU

John Elder, Valdosta State University, jfelder@valdosta.edu

Theresa Grove, Valdosta State University, tjgrove@valdosta.edu

Project Lead: originally Joshua Reece, currently Theresa Grove

Course Name(s) and Course Numbers: Principles of Biology II (BIOL1108)

Semester Project Began: Fall 2015

Semester(s) of Implementation: originally scheduled for Fall 2016, but Gretchen Bielmyer left VSU and so has been pushed to Spring 2017

Average Number of Students Per Course Section: 25

Number of Course Sections Affected by Implementation: 3 in Spring 2017, but 12 per year when fully implemented by all faculty

Total Number of Students Affected by Implementation: 75-300

1. Narrative

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

- Summary of your transformation experience, including challenges and accomplishments
- Transformative impacts on your instruction
- Transformative impacts on your students and their performance

Slides were prepared and assignments were developed in preparation for implementation during fall 2016. Faculty (Reece, Bielmyer, Elder, and Grove) worked well together to prepare for the implementation; however, challenges due to loss of faculty were not able to implement the changes as described, and have made it necessary to postpone implementation until Spring 2017. Challenges were losing faculty due to contract non-renewal (Reece) and accepting a job at another university at the last minute (Bielmyer). Bielmyer was scheduled to teach BIOL1108 in fall 2016 and implement the proposed changes to BIOL1108 as described and planned in the proposal. However, she accepted a position during summer 2016 and left last minute. Grove therefore is going to implement all the changes when she teaches BIOL1108 in spring 2016. In fall 2016 Elder and Grove were already scheduled to teach other courses and could not teach 1108, which is why the changes were not implemented. Therefore as of this final report there are no data from classrooms to determine whether or not using the OpenStax textbook and implementing the new data analysis assignments resulted in significant transformations to BIOL1108. These will be evaluated during the Spring 2017 semester.

With respect to our project goals (see below) due to faculty leaving last minute and not being able to pilot the Openstax textbook and developed learning material, Goals 1, 6, and 7 will not be completed until Spring 2017; however Goals 2, 3, 4, and 5 have been completed. In detail: Goal 1) to replace the existing textbook with the free,

OpenStax majors biology book was to be piloted fall 2016, but currently scheduled spring 2017. Goal 2) to develop learning outcomes and lecture guides that complement the OpenStax textbook and align with existing BIOL1108 goals is completed. Goal 3) to develop formative and summative assessments that complement the textbook and align with existing BIOL1108 goals is completed. Goal 4) to integrate textbook material with BIOL1108 lab exercises to ensure that lecture material complements lab material is completed. Goal 5) to identify at least two primary literature articles that cover topics central to the course and can be used as case studies integrated with lecture is completed. Goal 6) to curate lecture guides, assessment tools, etc with the OpenStax CNX database will be completed and all learning tools will be made available after they are piloted spring 2017. Goal 7) to assess student performance, engagement and perception will now be completed spring 2017.

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

The major lesson is do not acquire grant funding to modify existing courses when universities are in a state of flux, especially with respect to faculty attrition.

2. Quotes

- Provide three quotes from students evaluating their experience with the no-cost learning materials.

Because of the necessity to postpone implementation, there are no quotes available.

3. Quantitative and Qualitative Measures

Note: these cannot be determined at this point because we were unable to implement the project due to loss of faculty immediately prior to fall 2016 when the changes were to be implemented. These data will be collected spring 2017; I have indicated this at each point.

3a. Overall Measurements

Student Opinion of Materials

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

Cannot be determined fall 2016; will be determined spring 2017

Total number of students affected in this project: _____

- Positive: _____ % of _____ number of respondents
- Neutral: _____ % of _____ number of respondents

- Negative: _____ % of _____ 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?

Cannot be determined fall 2016; will be determined spring 2017

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?

Drop/Fail/Withdraw Rate:

Cannot be determined fall 2016; will be determined spring 2017

_____ % of students, out of a total _____ 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

Cannot be determined fall 2016; will be determined spring 2017

- *In this section, summarize the supporting impact data that you are submitting, including all quantitative and qualitative measures of impact on student success and experience. Include all measures as described in your proposal, along with any measures developed after the proposal submission.*
- *Include measures such as:*
 - *Drop, fail, withdraw (DFW) delta rates*

- *Course retention and completion rates*
- *Average GPA*
- *Pre-and post-transformation DFW comparison*
- *Student success in learning objectives*
- *Surveys, interviews, and other qualitative measures*
- *Indicate any co-factors that might have influenced the outcomes for better or worse.*
- *When submitting your final report, as noted above, you will also need to provide the separate file of supporting data on the impact of your Textbook Transformation (surveys, analyzed data collected, etc.)*

4. Sustainability Plan

- *Describe how your project team or department will offer the materials in the course(s) in the future, including the maintenance and updating of course materials.*

All slides and assignments will be made publically available on OpenStax CNX as described in the grant proposal after they are piloted Spring 2017 and revised after the pilot semester.

5. Future Plans

- *Describe any impacts or influences this project has had on your thinking about or selection of learning materials in this and other courses that you will teach in the future.*
- *Describe any planned or actual papers, presentations, publications, or other professional activities that you expect to produce that reflect your work on this project.*

Once OpenStax has been piloted in BIOL1108 during spring 2017 and student learning assessed the biology department will discuss and vote on whether to continue to use the free OpenStax textbook, a for profit textbook, or a mixture. The decision will be based on data obtained from using OpenStax in BIOL1107 and BIOL1108 courses. Slides, assignments, clicker questions, and exam questions will be further optimized and more exercises developed if the department chooses as a whole to continue to use OpenStax. Any new content will be made available to other faculty through OpenStax CNX.

6. Description of Photograph

- *List the names of the people in the separately uploaded photograph and their roles.*
- *E.G.: (left-right) Dr. Transformer, team lead and instructor of record; Agent Graphic, instructional designer; Dr. Philomath, subject matter expert; B. Bibliophile, librarian; A. Einstein, Student.*

(Left-right) Dr. Gretchen Bielmyer, Principle Investigator; Dr. John Elder, Principle Investigator; Dr. Theresa Grove, Principle Investigator; Dr. Joshua Reece, Principle Investigator