

**Affordable Learning Georgia Textbook Transformation Grants
Proposal Form**

Please complete per inline instructions; completed form not to exceed four pages.

Institution Name	Columbus State University		
Team Members (Name, Title, Department and email address for each)	Amy Sandy Faculty, Biology Department sandy_amy@columbusstate.edu Elizabeth Klar Faculty, Biology Department klar_elizabeth@columbusstate.edu		
Sponsor, Title, Department	Dr. Julie Ballenger, Chair Biology Department		
Course Name, Course Number and Semester Offered (Spring 2015 Required)	Principles of Biology, BIOL 1215K Spring 2015		
Average Number of Students in the Course	24/lab section Lecture sections typically have 96-192 students	Number Course sessions per Academic year	40
Award Category (pick one)	<input checked="" type="checkbox"/> No-Cost-to-Students Learning Materials <input type="checkbox"/> OpenStax Textbooks <input type="checkbox"/> Course Pack Pilots		
List the original course materials for students (including title, whether optional or required, & cost for each item)	<i>Biology: Concepts and Connection</i> , Third Custom Edition for Columbus State University, (taken from the 7 th Edition), by Reece, Taylor, Simon and Dickey. Pearson Custom Publishing, 2012. ISBN 13: 978-1-256-32435-5 Required. LearnSmart Access Card One Semester for Introduction to Biology © 2014 ISBN 9780077724894 Required. Departmental Lab Manual. Required.	<p align="right">\$143.75</p> <p align="right">\$25.00</p> <p align="right">\$5.00</p> <p align="right">Total Cost \$173.75</p>	
Projected Per Student Cost	\$50.00	Projected Per Student Savings (%)	72%

1. PROJECT GOALS

Goal: Promote student success in BIOL 1215K

The success of this goal will be assessed through the following measurable objectives.

Objective 1: Increase the number of students who purchase the required course materials for BIOL 1215K.

Objective 2: Increase student usage of the required textbook for BIOL 1215K.

Objective 3: Improve student grades in BIOL 1215K and improve the drop/fail/withdrawal rates for BIOL 1215K.

1.1 STATEMENT OF PROBLEM

Students have gotten creative when avoiding what they perceive to be outlandish textbook prices. According to the Book Industry Study Group, approximately twenty-one percent of students admitted to downloading textbooks for free from pirate web sites in 2012 (as cited in Parry, 2013). Students are also using the internet to purchase international editions of required texts and students also have the option to rent their textbooks at pretty much every campus bookstore around the country as well as from internet companies like Amazon.com (Parry, 2013).

Even with less costly alternatives available to students, according to findings from the United States Public Interest Research Group, sixty-five percent of students still did not purchase a textbook because of its price (as cited in Grasgreen, 2014). Likewise, findings from a survey conducted by the National Survey of Student Engagement, approximately one out of every three seniors and one in four freshmen opt out of buying the required text (as cited in Parry, 2013).

As financial aid options, like the now defunct Georgia HOPE book voucher program, become depleted cost burdens are being shifted to the students. These costs are sometimes too much for the student to handle and may delay students from taking multiple courses during a given semester because they cannot afford to buy all of the required course materials. The costs may even be so high that the student is prevented from taking some courses at all. In the United States, thirty-one percent of students may end up not registering for a course because of the high cost of the course materials (BCCampus, 2014).

There are many students who do buy textbooks, but some studies suggest that students may not read it enough or at all (Sikorski et al., 2002; Burton, 2014). Many students claim that reading the textbook is one of the most important tools that they use for studying for exams, however studies have found that students may do the majority of textbook reading “cramming” just before an exam (Sikorski, et al., 2002; Gurung & Martin, 2011).

It also seems that the impact of students not reading may have more widespread effects than just on the individual. Gurung and Martin (2011) concluded that a deficiency in reading compliance among students may diminish the likelihood of meaningful class discussions taking place. Even if students are successful in introductory courses without sufficiently reading the text for that course, they are quite possibly setting themselves up to not be successful in subsequent college courses, and perhaps beyond (Sikorski, et al., 2002).

Proposed solution

Utilization of a low-cost, open-access textbook powered by cloud technology for Principles of Biology (BIOL 1215K). This resource could save students over \$100.00 per student for an estimated cost savings of approximately \$118,800.00 per year (~960 students/year multiplied by \$123.75). In addition, this resource will allow the instructor to monitor the purchase and the usage of the reading material.

1.2 TRANSFORMATION ACTION PLAN

Identification of materials to be used and Course redesign

Boundless.com has been identified as the low-cost resource to be used in BIOL 1215K. Content on Boundless.com is licensed under CC-BY-SA 3.0 with attribution required. Content on Boundless.com is built by a community of educators along with subject-matter experts and students.

Instructors can create a class within Boundless.com and assign readings from the virtual resource to students. Students are given a specific URL to access the course materials. As students complete the assignments they are continuously quizzed at various checkpoints throughout the reading.

Assigned readings would be required to be completed prior to class. Instructors can then access reports that indicate each student's status for the assignments and their mastery of the associated questions.

Students currently purchase a faculty-developed lab manual. Funds from this grant will allow revisions to be made to the lab manual to update the material to correspond with the redesigned course.

Quantitative measures

Quantitative evaluation of the effectiveness of using an alternative textbook for BIOL 1215K will compare students using the alternative textbook who are enrolled in BIOL 1215K during Spring semester 2015 to students who used the traditional print textbook during Spring semester 2014 and Fall semester 2014. As group differences may occur, steps will be taken to control factors that may affect student outcomes. For example, comparisons will be made between students taught by the same instructor. Primary outcomes to be compared between the groups include exam grades, departmental assessment questions, course grades, and the number of students who withdraw from the course.

Qualitative measures

Qualitative evaluation of student satisfaction and success using the textbook of choice will be measured using the end-of-term student evaluations of instruction as well as a faculty-designed external survey to assess student satisfaction with course materials and their usage. Both surveys will include structured (response options provided) and open-ended (participants write responses) items.

1.3 TIMELINE

Task	Responsibility	Milestone
October - December 2014		
Identification of specific textbook to be used within Boundless.com	Amy Sandy	November 2, 2014
Identification of revisions to be made in faculty-developed lab manual	Elizabeth Klar and Amy Sandy	November 2, 2014
Completion of syllabus with Boundless assignments	Amy Sandy	December 31, 2014
Completion of revisions to be made in faculty-developed lab manual	Elizabeth Klar and Amy Sandy	December 31, 2014
Implementation of Boundless.com in selected BIOL 1215K sections	Amy Sandy	January 2015
Students will be provided an external survey to gauge student satisfaction using alternative resources.	Amy Sandy	March 16-20

1.4 BUDGET

Affordable Learning Georgia grant funds will be used to meet the project's goals, objectives, and any activities associated with the redesign of BIOL 1215K. The faculty members, Amy Sandy and Elizabeth Klar will half any funds received as payment for the time involved in the course redesign for BIOL 1215K at Columbus State University.

1.5 SUSTAINABILITY PLAN

Boundless.com offers collaborative, peer reviewed content. Course materials on Boundless.com are continuously being evaluated and improved by other faculty members within the Boundless community. Amy Sandy is currently a member of the Boundless.com community and has access to make comments for improvements.

Gurung and Martin (2011) propose that "students' failure to grasp the importance of text reading may be due, in part, to the lack of valid and visible exercises in class to help students make the connection between timely reading and success on exams" (p. 272). Likewise, Swanson (2014) discovered through his study that his own course structure actually did not emphasize the importance of the textbook that he required for the course that he taught. Although much of the responsibility for acquiring and reading the required text falls upon the student, it is also the instructor's responsibility to structure the course in a meaningful way around the textbook, if one is required.

Amy Sandy is responsible for teaching the majority of BIOL 1215K sections at Columbus State University. Mrs. Sandy has extensive experience in utilizing alternative teaching resources, such as an online adaptive learning software (LearnSmart), virtual laboratory platforms (LearnSmart Labs, PhysioEx, and Ph.ILS), and developing YouTube videos for her courses. Her expertise and history of using alternative teaching methods to promote student success are a testament to her ability to continue to use alternative resources that have proven beneficial to students.

1.6 REFERENCES & ATTACHMENTS

BCCampus. (2014, June 3). *Four lessons learned from implementing Textbook Zero programs*.

Retrieved from BCCampus: <http://bccampus.ca/2014/06/03/textbook-zero/>

Grasgreen, A. (2014, January 28). *Options Don't Stem Textbook Woes*. Retrieved from Inside

HigherEd: <https://www.insidehighered.com/news/2014/01/28/textbook-prices-still-crippling-students-report-says>

Gurung, R. A., & Martin, R. C. (2011). Predicting Textbook Reading: The Textbook Assessment and Usage Scale. *Teaching of Psychology*, 22-28.

Parry, M. (2013, January 27). *Students Get Savvier About Textbook Buying*. Retrieved from The

Chronicle of Higher Education: <http://chronicle.com/article/Students-Get-Savvier-About/136827>

Sikorski, J. F., Rich, K., Saville, B. K., Buskist, W., Drogan, O., & Davis, S. F. (2002). Student

use of introductory texts: Comparative survey findings from two universities. *Teaching of Psychology*, 312-313.

PROPOSAL SUBMISSION: ALL PROPOSAL DOCUMENTS, REFERENCES, AND ATTACHMENTS SHOULD BE SUBMITTED IN A SINGLE EMAIL TO ALG@GATECH.EDU BY 5:00 PM, EST, SEPTEMBER 8, 2014.