



Textbook Transformation Grants Round One: Spring Semester 2015 Final Report Summary

Background

The Affordable Learning Georgia (ALG) Textbook Transformation Grants are intended to pilot different approaches in USG courses for textbook transformation including adoption, adaptation, and creation of open educational resources (OER) and/or identification and adoption of materials already available through GALILEO and USG libraries. The grants help support the release time, materials, instructional design, library research and materials identification, and professional development needed for faculty to transform their use of learning materials.

Round One project teams of two or more were awarded up to \$10,800 to transform materials in a single course for a single semester, in three categories: No-Cost-to-Students, OpenStax Textbooks, and Course Pack Pilots. Projects that addressed the [Top 50 Lower Division Courses were encouraged](#). In Fall semester 2014, 30 grant proposals were accepted in the Round One Request for Proposals (RFP) from 19 USG campuses, replacing textbooks in 36 courses for an estimated 40,006 students annually, with an estimated annual impact of over \$2.2 million. (One grant team has since been reclassified as a Round Two team, due to an extended project timeline. Therefore, the course count by the time of the final report is 35, and the estimates for Round One are now 38,381 students annually and over two million dollars in annual student savings.)

Round One projects are comprised of 23 No-Cost-to-Students projects, five OpenStax Textbooks projects, and one Course Pack Pilots project. Spring 2015 implementations were delivered in these 35 courses, 18 of which are in the top 50-enrolled USG lower division courses.

All grant projects and the course numbers affected are included in the List of Round 1 Grantees: http://affordablelearninggeorgia.org/about/textbook_transformation_grants_round_1_grantees

View all Top 50 USG Lower-Division Courses: http://www.affordablelearninggeorgia.org/find_textbooks/alg_top_courses

As required for compliance, all project teams submitted final reports by June 1, 2015. Final reports included photos of teams and classes, quotes from students and professors, and data on student performance, drop/fail/withdraw rates, and student responses to the implemented resources.

Highlights

An overwhelming majority of students affected by the Textbook Transformation Grants were positive about the savings and access they provide, while instructors found that their projects were important experiences in informing their instructional knowledge and methods. 28 out of 29 project team leaders plan on using more affordable materials in the future, and students often preferred the experience of

using diverse materials selected by their instructors over a single textbook with a single author or group of authors. Even though these projects were on a more compressed timeline than future rounds, they resulted in mostly positive or neutral comparative performance and retention data compared to previous semesters, control groups, and/or instructor and departmental averages, all while saving students over \$760,000 total in just one semester.

This summary report addresses the following topics:

- Round One as a Pilot Project
- Analysis Challenges
- Grantee Experiences
- Savings
- Student Satisfaction
- Student Performance, Retention, and Progression
- Lessons Learned
- Conclusions

Round One as a Pilot Project

Funding for the Textbook Transformation Grants program became available in July 2014. Affordable Learning Georgia staff had not previously administered a grant program, and the goal was to get projects going as quickly as possible in order to have transformed materials in the hands of students by Spring semester 2015. Therefore, the grant teams in Round One were not only the first teams to take part in the grant program, but they also experienced what ALG considered to be a “compressed timeline,” with all implementation work taking place over the Fall 2014 semester, and full course implementation in Spring 2015. In contrast, more recent Textbook Transformation Grantees have more lead time between the grant award process and implementation, as well as multiple options for semesters of implementation.

Round One also offered many learning opportunities on what types of support ALG would need to provide the teams, how to manage reporting and other compliance requirements, and how best to address frequently occurring questions and issues. As a result, the mandatory kick-off meetings now include a greater focus on team planning, and follow-up webinars focus on platform and reporting requirements. At the conclusion of this Round One process, ALG is not only analyzing the results and data reported by the teams with great interest, but also refining suggested data collection processes for future rounds so that the final reports can be more meaningful and the results more easily normed. Report requirements will include provision of a complete chronological syllabus with embedded links and digital photographs in specific dimensions.

Analysis Challenges

Challenges in performing overall analysis of the final report data from the 30 different projects include:

- The diversity of comparative data used to determine outcomes
 - Variations in previous semesters compared
 - Variations in using departmental or instructor average instead of previous semesters
 - Enrollment shifts between Fall and Spring, including unique student performance circumstances in Spring sections of a course
- The difficulty of norming diverse data in order to produce valid observations

Grantee Experiences

Round One project teams had an overall positive experience in the implementation process and teaching with affordable materials. This can be gathered from the overwhelming majority of teams planning to use affordable materials in the future, usually indicated in the Sustainability Plan or Future Plans sections of the final reports. Within the 29 projects, 28 teams plan on using affordable materials in future semesters. The one project without a plan to use affordable materials in future semesters did so due to student dissatisfaction with a supplementary low-cost homework resource.

As an indication of the quality of the resources selected, 26 teams (90%) plan on using the specific affordable resources implemented in their projects in future semesters, often with improvements or additions planned. For teams who experienced issues with the materials selected, most teams indicated plans to select new affordable materials in the future or add to/improve upon the materials selected. These findings are the best indicator that the use of grants to support OER and alternative low-cost material adoption activities is a valuable tool in building sustainable low-cost learning materials practices among faculty.

For example, Drs. Lester and Lawrence's grant team indicated significant difficulties with the open textbook selected by the team for their American Government (POLS 1101) course. In response to this, both team members are co-authoring an upcoming OpenStax College open textbook for the course.

When teams experienced issues with the materials selected for the project, they still saw the experience as positive overall, enhancing their teaching methods and instructional knowledge moving forward:

"Our participation in this project has increased our awareness of new developments in open and free-to-students content for classroom use. It has also demonstrated the strong interest of students in lower-cost alternatives to traditional textbooks at our institution, particularly if quality can be maintained in the process." -Dr. Julie Lester, Middle Georgia State College

These experiences have also led to the current or future production of scholarship around implementing affordable materials in the classroom. Twenty teams have already conducted or will conduct scholarly work, such as writing articles and presenting at state, national, and international conferences, regarding their experiences within the grant project.

"I have no doubt that others will be interested to learn about these outcomes and how to more effectively utilize content in their courses." -Dr. Deanna Cozart, University of Georgia

Savings

Round 1:

\$303,390

awarded to grantees

4,950

students affected

\$760,000

saved in **one semester**

In Spring 2015, 35 grant-supported courses were taught to 4,950 students and saved these students over \$760,000 in student textbook costs in relation to their commercial equivalent, the purchase of a new printed commercial textbook. The enrollment figures predictably differ from the initial estimates due to the annual nature of the initial estimates—highly-enrolled courses often see more enrollment in the Fall semester than the Spring, for example.

The total savings of \$760,000 in one semester indicates that over the Fall, Spring, and multiple Summer semesters, the Spring 2015 savings estimates are largely in line with the initial annual estimates. Moreover, these student savings in only one semester of the project are more than twice the

amount awarded the 29 grant teams (\$303,390). The return on the investment to students is clearly high even with one semester of affordable implemented resources. With most teams indicating that these materials or other affordable materials will be used in future semesters, a high sustainability of these student savings is anticipated over the next academic year, leading to an even higher return on the initial grant awards as time passes.

"I come from a background where money is tight, and any aspect where money can be saved makes a big difference for me. I always try to find books online or see if my friends have them to avoid paying for them... I can say that not having to pay for the books for this class definitely helped me out."
-Student of Drs. Choi and Carpenter, Georgia Institute of Technology

Student Satisfaction

The final reports also provided diverse qualitative and quantitative student satisfaction measures and testimonials, including open-ended student survey responses, scored student evaluation responses, quotes from students, and experiences within faculty narratives. In this analysis, students were highly satisfied with the affordability and ease of access with open textbooks and affordable materials.

Student Satisfaction Measures (29 out of 29 teams reporting):

- 23 teams (85%, representing 4,205 out of 4,950 students affected) experienced an overall positive response to the materials and/or courses in which the materials were implemented.
- Four teams (13%, representing 625 out of 4,950 students affected) experienced an overall mixed response to the materials and/or courses in which the materials were implemented.
- Two teams (2%, representing 120 out of 4,950 students affected) experienced an overall negative response to the materials and/or courses in which the materials were implemented.

85% of students affected experienced an **overall positive response** to the new course materials.

Negative student responses primarily involved complaints within two categories:

- Lack of a print alternative to online no-cost materials, or
- Lack of a direct connection between the resources implemented and the evaluations (tests, quizzes) given to students throughout the course.

Students of the two teams with an overall negative response to the materials had experienced issues with the usability, organization, and writing style of the resources they selected. Teams are responding to this feedback by selecting new materials and improving existing materials.

"I enjoyed this class. I loved how I didn't have to spend money on buying a book that I would never use again. Putting all the resources for the class online made it super easy to access so that came in handy." -Student of Dr. James and Holt, Valdosta State University

Student Performance, Retention, and Progression

To the extent possible to determine, the majority of Round One project teams saw no significant changes to student performance outcomes in comparison to control groups, previous semesters, faculty averages, and/or departmental averages:

Comparative data on student performance varied in each group, and unique circumstances to one particular project often put the significance of a positive or negative outcome into question. In many cases, interpretations of this data required an analysis of faculty narratives in order to get the context of what outcomes were expected from the project in terms of comparable and positive or negative results. Some projects had co-variant factors that possibly outweighed the impact of the no-cost textbook.

For example, one project's Spring semester students would consistently perform worse than Fall semester students due to the structure of the course: it was meant to be taken in the Fall, with Spring sections largely composed of students who did not pass the course the first time. Therefore, repeat student results are not *prima facie* normable with first-time students. Another project's students were not only seeing a change in resources, but a change in the level of faculty time given to them in class:

this class was the first to no longer have the faculty instructor within their labs. Such co-variants make it difficult to attribute results solely to the no-cost-to-students intervention.

Learning Outcomes / Grade Measures (28 out of 29 teams reporting):

- Seven teams (22%, representing 1,065 out of 4,910 students affected) experienced an overall significant positive comparative impact on student learning outcomes and grades in Spring semester 2015 over previous semesters.
- 17 teams (69%, representing 3,392 out of 4,910 students affected) experienced neither a positive or negative impact on student learning outcomes and grades in Spring semester 2015 over previous semesters.
- Four teams (9%, representing 453 out of 4,910 students affected) experienced an overall significant negative comparative impact on learning outcomes and grades in Spring semester 2015 over previous semesters.

91% of students (24 teams) affected experienced either a **positive or neutral impact** on performance outcomes.

80% of students (20 teams) affected experienced either a **positive or neutral impact** on drop / fail / withdraw rates.

Drop/Fail/Withdraw Measures (24 out of 29 teams reporting):

- Five teams (8%, representing 349 out of 4,481 students affected) experienced an overall significant positive comparative impact on DFW rates in Spring semester 2015.
- 15 teams (72%, representing 3,245 out of 4,481 students affected) experienced neither a positive or negative comparative impact on DFW rates in Spring semester 2015.
- Four teams (10%, representing 452 out of 4,481 students affected) experienced an overall significant negative comparative impact on DFW rates in Spring semester 2015.

Project teams often saw both positive and neutral outcomes results as successes within the project, due to the materials being more affordable to students and the high level of satisfaction from students in courses with affordable materials.

“The consistent level of performance also underscores the quality of information provided by the freely available OpenStax textbook relative to the previous text used. Based on these results, the team will continue to use the OpenStax text as the primary textbook for the two courses.”

-Dr. Timothy Henkel, Valdosta State University

Lessons Learned

Because of the shared lessons learned from each grant team's final report, Affordable Learning Georgia suggests the following practices when implementing open, no-cost, or low-cost materials to replace a commercial textbook in a course:

- **Align all materials:** Faculty should ensure that the OER, no-cost materials, or affordable materials selected align with the outcomes of their courses, and subsequently that all methods of student evaluation, such as quizzes and tests, are aligned with these new affordable materials.
- **Organize materials chronologically:** Project teams with very positive student responses to the organization of materials were often the teams who organized their required readings and materials by the timeframe in which they need to be read, heard, and/or viewed.
 - Drs. James and Holt's project included the creation of a LibGuide which separated all readings by course units (<http://libguides.valdosta.edu/PHIL2020ALG>).
 - Drs. Wheeler and Hepler's project materials were categorized by module, day, and step (<http://getlibraryhelp.highlands.edu/fcst1010mar>).
- **Involve students in material reviews:** A few project teams conducted extensive reviews of their materials only to find that these materials did not work as planned for students within the implemented course. Involving students in a materials review or read-through could help teams identify these issues prior to the implementation of materials within a course.
- **Adjust materials based on student feedback and performance:** As indicated above, the implementation of materials in the classroom can produce different outcomes and reactions than expected. Along with involving students in the evaluation process in the future, many groups are making additional content and improving existing content due to student performance and feedback.
- **If possible, select open textbooks without a No Derivatives clause:** Not all Creative Commons licenses are equally open, and one project team found themselves needing to edit an open textbook mid-semester, but they could not due to the CC-ND (No Derivatives) clause, restricting the team from making any derivative works from the original textbook. While there are workarounds, such as creating supplemental readings to fix the issue, avoid materials with an ND clause if possible.

"Resoundingly, students were appreciative of the instructor's willingness to use no cost materials. Additionally, students stated the resources used were more timely, better aligned with course objectives, more interesting than [commercial] books used in various classes, and more engaging."
-Dr. Loleta Sartin, Middle Georgia State College

Conclusions

The final reports indicate some remarkably positive benefits to participating in and being affected by a Textbook Transformation Grants project:

- An overwhelming majority of students affected by the Textbook Transformation Grants were positive about the savings and access they provide.
- Instructors found that their projects were important experiences in informing their instructional knowledge and methods.
- Instructors overall enjoyed teaching with affordable resources and plan on using more affordable materials in the future.
- Instructors reported that in many cases, students preferred the experience of using diverse materials that had been “curated” by the instructor over a single textbook with a single author or group of authors.
- Instructors found many opportunities to share their experiences and findings through conference presentations, panels, and articles.
- These compressed-timeline pilot projects resulted in mostly positive or comparable performance and retention data compared to previous semesters, control groups, and/or instructor and departmental averages, all while saving students over \$760,000 total in just one semester.

Furthermore, as grantee Dr. Vaught states below, instructors can show USG students a higher degree of care and concern for their well-being and financial stability by implementing affordable materials:

“When the textbook is provided free of charge, it contributes to a more democratic experience for all students because it eliminates economic advantages that some students may have over others in procuring the course materials.

While free textbooks do little to address the broader challenge of rising tuition costs and their impact on student learning, it does contribute to building a greater sense of community between the students and the professors by showing the students [that they] care about their personal finances.”

–Dr. Seneca Vaught, Kennesaw State University
