Summer 2016

Introduction to General Psychology (Georgia Highlands College)

J. Sean Callahan
Georgia Highlands College, scallaha@highlands.edu

Amy Burger
Georgia Highlands College, aburger@highlands.edu

Follow this and additional works at: http://oer.galileo.usg.edu/psychology-collections

Part of the Psychology Commons

Recommended Citation
http://oer.galileo.usg.edu/psychology-collections/7

This Grants Collection is brought to you for free and open access by the Psychology, Sociology, Anthropology, and Social Work at GALILEO Open Learning Materials. It has been accepted for inclusion in Psychology, Sociology, Anthropology, and Social Work Grants Collections by an authorized administrator of GALILEO Open Learning Materials. For more information, please contact affordablelearninggeorgia@usg.edu.
J. Sean Callahan, Amy Burger

Introduction to General Psychology
Grants Collection

Affordable Learning Georgia Grants Collections are intended to provide faculty with the frameworks to quickly implement or revise the same materials as a Textbook Transformation Grants team, along with the aims and lessons learned from project teams during the implementation process.

Each collection contains the following materials:

- Linked Syllabus
  - The syllabus should provide the framework for both direct implementation of the grant team’s selected and created materials and the adaptation/ transformation of these materials.
- Initial Proposal
  - The initial proposal describes the grant project’s aims in detail.
- Final Report
  - The final report describes the outcomes of the project and any lessons learned.

Unless otherwise indicated, all Grants Collection materials are licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).
Syllabus
Class Schedule and Important Dates

*Schedule and dates may be changed during the semester.

Aug. 15 Syllabus
Aug. 17 Chapter 3 Biology of Behavior
Aug. 22 Chapter 3 Biology of Behavior
Aug. 24 Chapter 3 Biology of Behavior
Aug. 29 Chapter 3 Biology of Behavior
Aug. 31 Chapter 2 Research

Sep. 5 Labor Day
Sep. 7 Library/APA Presentation, Exam 1 Due
Sep. 12 Chapter 9 Human Development
Sep. 14 Chapter 9 Human Development
Sep. 19 Chapter 9 Human Development
Sep. 21 Chapter 9 Human Development
Sep. 26 Chapter 8 Memory, Library/APA Assignment Due, First Draft of Paper Due
Sep. 28 Chapter 8 Memory

Oct. 3 Chapter 8 Memory
Oct. 5 Chapter 6 Learning
Oct. 10 Fall Break
Oct. 12 Chapter 6 Learning
Oct. 17 Chapter 6 Learning

Oct. 19 Chapter 11 Personality Exam 2 Due
Oct. 24 Chapter 11 Personality
Oct. 26 Chapter 11 Personality
Oct. 31 Chapter 11 Personality

Nov. 2 Chapter 12 Social Behavior
Nov. 7 Chapter 12 Social Behavior
Nov. 9 Chapter 12 Social Behavior
Nov. 14 Chapter 12 Social Behavior
Nov. 16 Chapter 15 Psychological Disorders Exam 3 Due
Nov. 21 Chapter 15 Psychological Disorders
Nov. 23 Chapter 15 Psychological Disorders, Final Draft of Paper Due
Nov. 28 Chapter 16 Treatment of Psychological Disorders
Nov. 30 Chapter 16 Treatment of Psychological Disorders

Dec. 5 Chapter 16 Treatment of Psychological Disorders
Dec. 7 Chapter 16 Treatment of Psychological Disorders Exam 4 Due

Final Exam — Dec., 12—12:00pm
Initial Proposal
Application Details
Manage Application: Textbook Transformation Grant

Award Cycle: Round 3

Application Title: 141
Submitter First Name: J. Sean
Submitter Last Name: Callahan
Submitter Title: Asst. Prof. of Psy and Dir. of Diversity Initiatives
Submitter Email Address: scallaha@highlands.edu
Submitter Phone Number: 706-340-0192
Submitter Campus Role: Proposal Investigator (Primary or additional)

Applicant First Name: J. Sean
Applicant Last Name: Callahan
Co-Applicant Name(s): Amy Burger
Applicant Email Address: scallaha@highlands.edu
Applicant Phone Number: 706-340-0192
Primary Appointment Title: Asst. Prof. of Psy
Institution Name(s): Georgia Highlands College

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

Dr. J. Sean Callahan, Assistant Professor of Psychology and Director of Diversity Initiatives, scallaha@highlands.edu

Ms. Amy Burger, Librarian and Instructional Designer, aburger@highlands.edu

Sponsor (Name, Title, Department, Institution):

Dr. Alan Nichols, Dean, Division of Social Sciences, Business, and Education, Georgia Highlands College, anichols@highlands.edu

Proposal Title: 141

Course Names, Course Numbers and Semesters Offered:
Introduction to General Psychology, PSYC 1101

Fall 2015, Spring 2016, Summer 2016 and beyond

**Final Semester of Instruction:** Summer 2016

**Average Number of Students per Course Section:** 31

**Number of Course Sections Affected by Implementation in Academic Year:** 8

**Total Number of Students Affected by Implementation in Academic Year:** 248

**List the original course materials for students (including title, whether optional or required, & cost for each item):**

- Feist and Rosenberg (2015), Psychology: Perspectives and Connections, 3rd. Ed. with Connect+ Access
- Course Materials Required
- $218.09

**Proposal Categories:** OpenStax Textbooks

**Requested Amount of Funding:** $10,800

**Original per Student Cost:** $218.09

**Post-Proposal Projected Student Cost:** 0

**Projected Per Student Savings:** 100%

**Plan for Hosting Materials:** OpenStax CNX

**Project Goals:**

We intend to provide free, high quality learning materials for Georgia Highlands College students who take Introduction to General Psychology (PSYC 1101) by converting from current purchased textbook and adopting the OpenStax’s College Psychology e-textbook.

By adopting Open Educational Resources (OER) materials, we expect to see an increase in enrollment and retention as well as completion rates of our students.

The adoption of free, open, high quality resources also makes higher education more affordable to a higher number of Georgia Highlands College students, thus contributing to the goals of Complete College Georgia.
To evaluate and assess the effectiveness of this conversion we will measure students’ perceptions and experiences and course success rates with OER materials compared against courses not using OpenStax.

Statement of Transformation:

The recent push by the current administration to make community college free to anyone who wants to attend makes it imperative that the costs associated with pursuing a degree as affordable as possible (Mason, 2015). Georgia Highlands College (GHC) is an open access institution that offers high quality education at a reasonable price. Many of the students who attend GHC, however, come from backgrounds and are in life situations that impede them from purchasing the expensive learning materials. Many of these same students are also required to enroll and successfully complete PSYC 1101 (in Area F category). The market costs for the current textbook and materials is $218.09. This is an extremely expensive option for many of the students who attend this institution. As a result of this transformation, the collective savings for students in these eight sections is $54,064 each academic year. As the course is developed and more faculty adopt the redesigned course, the potential collective student savings tops $300,000.

The families of our students are also impacted by this transformation, as many them use financial aid to help support households, pay for childcare, and for transportation to and from school. No-cost, high quality OER helps alleviate the deleterious factors that impede student success. For example, students will have access to the OpenStax College e-textbook at the start of the semester, rather than two weeks into the semester (after they receive financial aid overpayment), and are able to complete readings, quizzes, and tests associated with the course in a timely manner, thus increasing retention, course success, and graduation rates. The conversion to Open Educational Resources would attract more students to take courses in our Psychology program. More broadly, this move towards no-cost, easily accessible learning materials supports the mission of GHC as an access institution.

Transformation Action Plan:

The transformation action plan is comprised of three phases before course delivery in the Fall 2015 (pre-planning, planning, and course redesign).

Pre-planning

This phase has already completed. OpenStax’s College Psychology e-textbook has been identified, reviewed, and selected as the primary textbook for PSYC 1101.

Planning and Course Redesign
These phases of the plan are already in progress. Activities, websites, articles, and videos are being identified and assessed for appropriateness and effectiveness as supplemental materials. The backward design process in Dee Fink’s *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses* and the American Association of Colleges and Universities’ *VALUE Rubric* will guide course redesign. Fink’s approach will provide the methodology for learning outcomes, while the VALUE rubric helps to support the internationalization and globalization of the curriculum. This systematic reorganization, including the course syllabus revision, will occur during the summer 2015. Dr. Callahan is the instructor of record and will serve as subject matter expert and identify course materials. Ms. Burger will serve as instructional designer, assist in identifying course materials, and design modules for access in D2L. Both Ms. Burger and Dr. Callahan will serve co-investigators and work together to evaluate and assess student success and experience, including survey construction and distribution, protocol development, and data analysis.

**Quantitative & Qualitative Measures:** Quantitative and qualitative measures administered in the Fall, Spring, and Summer semesters of the 2015-2016 academic year will be used to gauge the impact on student success and experience. The quantitative assessment includes a pre- and post-survey to compare the perceived quality, experience, and satisfaction of students using OpenStax’s Psychology and other online resources vs. previous semesters or classes using purchased textbook and materials. SPSS will be used to enter and analyze data to conclude there is significant statistical difference in students’ feelings toward the use of e-textbooks before and after course delivery. The achievement of learning outcomes, DFW rate, and tests/grades from courses using OpenStax will also be compared to previous semester or courses using purchased textbooks with t-test comparison. Qualitatively, interviews and surveys will be used to gather information regarding students’ comparisons of e-textbooks and materials and purchased textbooks. More specifically, this data will be analyzed for themes and patterns that help elucidate the effects of the adoption on student performance.

**Timeline:**

October 2014-December 2014—Selected and reviewed OpenStax’s College Psychology e-textbook as an appropriate, high quality, OER
January 2015-May 2015—Identify and locate no-cost, online, supplemental content materials

June 2015-August 2015—Systematic course redesign to modules on D2L

July 2015—Course buyout/Overload begins for Ms. Burger and Dr. Callahan, if funded

Fall 2015—Redesigned course delivery of PSYC 1101, Data collection on student experience and success begins and continues throughout semester

December 2015-January 2015—Co-Investigators compile data and revise course per student evaluations

Budget:

Amy Burger, Librarian and Instructional Designer $5000
J. Sean Callahan, Instructor of Record $5000
Travel to Kick Off $800
Total $10,800

Sustainability Plan:

The larger scope of this project is to create a master course model with modules consisting of assignments, activities, and rubrics that allow instructors to customize the content to their teaching style and economize the time they put into instruction. This would encourage faculty to adopt the redesigned course. The master course and modules will also be made available to faculty at other USG institutions. Course materials will be maintained Ms. Burger and Dr. Callahan for use into the foreseeable future.
Open Educational Resources (OER) have proven a worthy response to the rising cost of textbooks. A review of the literature indicates substantial evidence for the success of the OER model; in fact, for community colleges in particular, the use of OER is considered a "best practice" (Myran, 2013).

For Georgia Highlands College specifically, the use of OER translates not only to cost savings for students, it is also closely aligned with the spirit embodied by the institution. Georgia Highlands College’s philosophy is that education should be accessible and affordable, and the ever-increasing cost of textbooks, for students already struggling to pay tuition, can add an extra, unnecessary burden—a burden that OER can alleviate.

For Georgia Highlands College’s PSYC 1101 students, the current text, at a cost of $218.09, represents 82% of the tuition for the class. This additional financial obligation is at worst, so costly as to be an impediment—over 23 percent of students in one study said they “had occasionally not registered for a particular course or section because of the high textbook costs,” and at best, an additional expense—one that 37 percent of students in the same study opted to forgo (Morris-Babb & Henderson, 2012).

The benefits of OER adoption go beyond the financial, extending to the curricular; the use of OER is considered “a success factor of positive teaching and learning practices” (Everard & Pierre, 2014). Additionally, a 2012 study found that the grades were higher for students in courses using OER compared to those using standard textbooks (Feldstein, Martin, Hudson, Warren, Hilton, & Wiley). A separate study corroborated the positive effect on student grades, finding also an improvement in retention rates in classes that used open textbooks (Hilton & Laman, 2012).

An increased rate of OER adoption will benefit students, who will see positive educational outcomes and higher affordability, and institutions, which will benefit from an increased rate of student retention.

References


Mason, K. C. (2015, January 20). Obama: Community college should be ‘as free and universal in America as high school’. Retrieved from
To whom it may concern:

I write this letter as Dean of Social Sciences, Business, and Education at Georgia Highlands College in support of Dr. Sean Callahan’s proposal for an Affordable Learning Georgia Textbook Transformation Grant in Rounds Three, Four, and Five for implementation beginning Summer Semester 2015; running through Spring Semester 2017.

Dr. Callahan is proposing to replace the standard textbook in his PSYC 1101 (Introduction to Psychology) with OpenStax texts. This will result in a savings for students of nearly $220 per student per course. I believe that this is an especially worthy undertaking here at Georgia Highlands, where many of our students depend on financial aid not only to meet the costs of their education but their living expenses as well. I would expect that adopting OER materials will help Georgia Highlands in the areas of retention, a USG initiative, and course completion, a long-standing USG goal. Currently, many students do not purchase expensive texts for courses and their performance suffers. By adopting the high-quality OpenStax text, a significant barrier to student performance and completion will be removed.

Dr. Callahan has a well-developed plan for shifting to the OpenStax text. I fully support this shift, and have encouraged other faculty in my Division to shift to OER, where available, for their courses. As an institution, Georgia Highlands strives to be at the forefront of the University System of Georgia’s plans to make college affordable through lowering the cost of textbooks through Use of OERs as well as seeking out low-cost texts. I believe Dr. Callahan is worthy of financial support as he works towards these ends and I strongly support his application for grant funding.

Best,
Dr. Alan Nichols  
Dean, Division of Social Sciences, Business, and Education  
Georgia Highlands College  
3175 Cedartown Highway  
Rome GA, 30161  
706-368-7615  
anichols@highlands.edu
Final Report
Date: 8-11-16

Grant Number: 141

Institution Name(s): Georgia Highlands College and Dalton State University

Team Members (Name, Title, Department, Institutions if different, and email address for each): Dr. J. Sean Callahan, Assoc. Prof. of Psy., Georgia Highlands College, scallaha@highlands.edu
Ms. Amy Burger, Librarian, Dalton State University, aburger1@daltonstate.edu

Project Lead: Dr. J. Sean Callahan

Course Name(s) and Course Numbers: Introduction to General Psychology-PSYC 1101

Semester Project Began: Fall 2015

Semester(s) of Implementation: Summer 2016

Average Number of Students Per Course Section: 28.37

Number of Course Sections Affected by Implementation: 8

Total Number of Students Affected by Implementation: 227

The goal of the project is to increase enrollment and retention as well as completion rates of our students. In working towards achieving this goal we adopted Open Educational Resources (OER). More specifically, we provided free, high quality learning materials by using the OpenStax Psychology textbook to Georgia Highlands College students who take Introduction to General Psychology. We made this conversion from an expensive required textbook and software package to an e-textbook and other OER materials with the intent to make higher education at Georgia Highlands College more affordable to a higher number of students. For this project, we reviewed materials for SaylorAcademy.org, MERLOT, NOBA, OpenStax College, and several others. The e-textbook from OpenStax College was chosen because of the ease of accessibility for students, compatibility with instructor’s teaching style, and structural similarity to the previous required textbook.

The transformation experience was enjoyable, but not without its challenges. A major challenge in the transformation process was locating content that could be used without copyright infringement. This challenge was addressed through a thorough, focused search for material on the Internet. The search for supplementary materials resulted in a robust cache of interesting and effective content to support the OpenStax eTextbook. The addition of the Crash Course, for example, videos was
appropriate for the goals of the project. These videos are 10-minute video reviews of key concepts, major figures, and important research studies in psychology. The topics of the videos coincide nicely with the chapters in the book and positively influenced the transformation experience.

The transformative impact on instruction occurred in several ways. Firstly, the accessibility of the OpenStax eTextbook and the videos on the web supported a flipped classroom teaching approach. This approach allowed for engaging interactions in the classroom rather than lecture-based experiences. Students were easily able to refer to the book to respond to the scenarios and apply concepts to real-world examples, in-class activities, and structured discussions. Secondly, the ease of accessibility made the course redesign compatible with flipped instructional strategy. Because the content material, quizzes, and exams were all hosted and made available through the Desire 2 Learn (D2L) learning management system, students were expected to read and watch the materials prior to class, saving the majority of instruction time for application, critique, and synthesis exercises. Thirdly, the OpenStax eTextbook is quite similar to the previously purchased textbook option in terms of structure and presentation of information. This similarity made the course redesign almost seamless and allowed more time to focus on prompting, supporting, and deepening students' thoughts and ideas. Lastly, the textbook and the supplementary materials were free and available in multiple formats. Students had access to the content on the first day of class. I did not have to delay assignments or activities or accept the lack of/barriers to resources (e.g. waiting for financial aid or the next pay period) as an explanation for students' lack of preparation.

2. Quotes

- “I really enjoyed using the Open Stax Psych book. Often times buying an expensive book that you rarely use can be a burden, but using this book as much as I did and receiving it for free is a relief.”

- “It makes all the difference in the world for people who have lower incomes or parents are not paying for classes and books.”

- “The fact that the textbook was free for this course really is why I was able to stay in it. Also, the eTextbook is really easy to navigate and a lot more convenient than a regular textbook since I am kind of always on the go.”

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: 227 (108 respondents)
- Positive: 91.66% of 108 number of respondents
- Neutral: 7.40% of 108 number of respondents
- Negative: 0.925 % of 108 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?

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)

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 (face-to-face):
___20.49_% of students, out of a total _161_ students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Drop/Fail/Withdraw Rate (online):
___46.42_% of students, out of a total __56__ 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)
<table>
<thead>
<tr>
<th>Term (Pre-transformation)</th>
<th>F</th>
<th>W</th>
<th>Total # Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2015</td>
<td>5</td>
<td>4</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>Summer 2015</td>
<td>1</td>
<td>4</td>
<td>31</td>
<td>16.12%</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>8</td>
<td>61</td>
<td>46.12%</td>
</tr>
</tbody>
</table>

DFW rates Online Course

<table>
<thead>
<tr>
<th>Term (Post-transformation)</th>
<th>F</th>
<th>W</th>
<th>Total # of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2016</td>
<td>2</td>
<td>3</td>
<td>29</td>
<td>17.24%</td>
</tr>
<tr>
<td>Summer 2016</td>
<td>5</td>
<td>6</td>
<td>27</td>
<td>40.74%</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>9</td>
<td>66</td>
<td>57.94%</td>
</tr>
</tbody>
</table>

DFW rates Online Course

<table>
<thead>
<tr>
<th>Term (Pre-transformation)</th>
<th>F</th>
<th>W</th>
<th>Total # of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2014</td>
<td>27</td>
<td>18</td>
<td>91</td>
<td>49.45%</td>
</tr>
<tr>
<td>Spring 2015</td>
<td>20</td>
<td>12</td>
<td>86</td>
<td>37.20%</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>40</td>
<td>177</td>
<td>43.50%</td>
</tr>
</tbody>
</table>

DFW rates Face-to-Face

<table>
<thead>
<tr>
<th>Term (Post-transformation)</th>
<th>W</th>
<th>F</th>
<th>Total # of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2015</td>
<td>5</td>
<td>6</td>
<td>64</td>
<td>17.18%</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>17</td>
<td>5</td>
<td>97</td>
<td>22.68%</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>11</td>
<td>161</td>
<td>20.49%</td>
</tr>
</tbody>
</table>

DFW rates Face-to-Face

**3b. Narrative**

In the face-to-face classes, the number of students who completed the course with a grade of D or better with the purchased textbook and software rose from 46 out of 91 students (50.54%) for the Fall 2014 and 54 out of 86 students (62.79%) for the Spring 2015 to 53 out of 64 students (82.81%) for the Fall 2015 and 75 out of 97 students (77.13%) for the Spring 2016. These data indicate a 32.26% and 14.52% increase in the number of students who successfully completed the course. However, there was a 9.03% decrease in the total enrollment, from 177 to 161.

For the online asynchronous classes 24 students (out of 34) for Fall 2014, 21 students out of 30 (70%) for Spring 2015, and 26 students out of 31 (83.87%) for
Summer 2015 semesters successfully completed the course with a D or better with the purchased textbook and software. It must be noted that transformation of online courses didn’t begin until Spring 2016. Therefore, comparison between pre- and post-transformation are confined to the Spring and Summer 2015 and Spring 2016 and Summer 2016. 24 students out of 29 (70%) and 16 students out of 27 (59.2%) completed the course successfully. These data indicate an 18.41% increase for the Spring semesters and a 29.65% decrease for the Summer semesters in regards to successful course completion. However, total enrollment for these courses decreased 8.19%, from 61 students to 56 students.

The differences in course enrollment between face-to-face and online courses are interesting. The growing popularity of online courses could explain this difference. The convenience of online learning may be related to the decrease in enrollment for face-to-face offerings and the increase in web-based classes. However, the 29.65% decrease in successful course completion for Summer 2016 is alarming. Even with the increased enrollment, this drop may indicate that while online courses are an attractive option, some students may have underestimated the level of engagement in web-based courses and/or experienced difficulty striking the work-life-school balance necessary for success in the fast-paced of truncated, web-based courses in the Summer. Their level of readiness and disequilibrium was evidenced through several emails from several students over the course of the semester to express their difficulty keeping up with the class. Often students explicitly stated that they withdrew from the class because of the pace and workload of the course. Other students requested to submit assignments, quizzes, discussion posts, and exams after the expressed deadlines.

Class averages are also a point of interest. While the average for online courses increased by 8.54% from pre-transformation (Spring 2015) to post-transformation (Spring 2016), there was 14.4% decrease in class averages from Summer 2015 to 2016. Again, student readiness and lack of work-life-school balance have been discussed as factors impacting this finding. The combined averages for pre- and post-transformation resulted in a 3.7% decrease, from 76.79% to 73.9%, between the two conditions.

<table>
<thead>
<tr>
<th>Class Averages (Pre-transformation)</th>
<th>Spring 2015</th>
<th>Summer 2015</th>
<th>Combined Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>71.23%</td>
<td>82.35%</td>
<td>76.79%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Averages (Post-transformation)</th>
<th>Spring 2016</th>
<th>Summer 2016</th>
<th>Combined Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>77.32%</td>
<td>70.49%</td>
<td>73.9%</td>
</tr>
</tbody>
</table>

Class Average-Online Courses
In the face-to-face classes, there is a considerable increase in the combined averages from pre-to post-transformation. From Fall 2014 to Fall 2015, there is 27.83% increase in the class averages, rising from 59.96% to 76.65%. When compared against each other the combined averages for Spring 2015 and 2016 also increased by 9.31%.

<table>
<thead>
<tr>
<th>Class Averages (Pre-transformation)</th>
<th>Fall 2014</th>
<th>Class Averages (Post-transformation)</th>
<th>Fall 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>71.45</td>
<td>C1</td>
<td>73.6</td>
</tr>
<tr>
<td>M1</td>
<td>54.62</td>
<td>M2</td>
<td>79.75</td>
</tr>
<tr>
<td>M3</td>
<td>53.83</td>
<td>Combined Averages</td>
<td>76.65</td>
</tr>
<tr>
<td>Combined Averages</td>
<td>59.96</td>
<td>Combined Averages</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spring 2015</td>
<td>Spring 2016</td>
</tr>
<tr>
<td>C5</td>
<td>71.35</td>
<td>C4</td>
<td>67.1</td>
</tr>
<tr>
<td>C4</td>
<td>57.06</td>
<td>C5</td>
<td>73.16</td>
</tr>
<tr>
<td>M4</td>
<td>67.48</td>
<td>M4</td>
<td>73.87</td>
</tr>
<tr>
<td>Combined Averages</td>
<td>65.29</td>
<td>Combined Averages</td>
<td>71.37</td>
</tr>
</tbody>
</table>

Class Averages Face-to-Face

In regards to qualitative data, 29 (26.85%) of the 108 respondents left comments to the open-ended question in the survey. The major themes are cost savings and access. Of those 29 responses, 13 (12.03% of total respondents) mentioned the financial benefits of using OER materials. 9 (8.33% of total respondents) of the 29 responses mentioned the accessibility and usefulness of the OER materials.

Issues with resources (technology and software) and time constraints impeded the analysis of the statistical significance of the pre- and post-transformation conditions.

To determine if adopting the OpenStax Psychology eTextbook influenced student success, we used a 2-sample t-test for independent means to compare the pre- and post-transformation groups class averages. The analysis was significant and had a moderate effect size. A statistical significance \( p < .0001 \) did appear when comparing class averages from pre- and post-transformation conditions, with an 8.5% increase in class averages during post-transformation phase. We would argue that this statistical significance represents a practical significance in terms of the adoption of the OpenStax Psychology eTextbook. (Graphs and \( p \) values included in supplemental materials.)

4. Sustainability Plan
This course was developed to serve as a master course made available through D2L for adjunct and full-time faculty teaching PSYC 1101. The instructor has recommended the OpenStax Psychology eTextbook and shared materials collected with colleagues. Since the start of the project, one adjunct faculty member and two of the four full-time faculty members have adopted the OpenStax Psychology eTextbook for PSYC 1101.

5. Future Plans

This iteration of the ALG project is considered a success. Outside of the increased DFW rate for the post-transformation, online version of PSYC 1101, course completion and student success rates increased. We intend to continue to collect data on the transformation for at least one more year to see if the DFW rates decrease for the online version in the Fall and Spring semesters. Survey questions will also be revised. Technical issues in regards to acquiring and supporting statistical computing software will have to be addressed to improve precision by providing statistical significance. The possibility using the OpenStax ebook in conjunction with other OER to create and customize an honor’s version of the course is also an appetizing prospect for future iterations.

Adopting the OpenStax ebook has played an impactful role in removing some of the barriers to student’s success. The web-based format of book made the flipped classroom approach easier, providing space for innovative and engaging in-class activities that provoke thought and support the journey toward mastery.