Date: 8-11-16

Grant Number: 141

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

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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

Goal of the project is to increase in enrollment and retention as well as completion rates of our students. In working towards achieving this goal we adopted Open Educational Resources materials. 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, compatibility with instructor's teaching style, and structural similarity to the previous required textbook.

The transformation experience was pleasant and enjoyable, but not with its challenges. A major challenge in the transformation process was locating content that could be used without copyright infringement. This challenge was via a thorough, focused hunt 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 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 videos coincide nicely with the chapters in the book. The OER and videos positively influenced the transformation experience.

The transformative impact on my 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 able easily 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 to my teaching style. Because the content material, quizzes, and exams were all hosted and made available through the 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 highly similar to the previous purchased textbook option in terms of structure and presentation of information. This similarity made the course redesign almost seamless and allowed me to focus more 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 excuse 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 recieving 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 text book 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?
Student outcomes should be described in detail in Section 3b.

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)

Term (Pre-transformation)	F	W	Total # Students	Percentage

Spring 2015	5	4	30	30%
Summer 2015	1	4	31	16.12%
Total	6	8	61	46.12%

DFW rates Online Course

Term (Post-transformation)	F	W	Total # of Students	Percentage
Spring 2016	2	3	29	17.24%
Summer 2016	5	6	27	40.74%
Total	7	9	66	57.94%

DFW rates Online Course

Term (Pre-transformation)	F	W	Total # of Students	Percentage
Fall 2014	27	18	91	49.45%
Spring 2015	20	12	86	37.20%
Total	47	40	177	43.50%

DFW rates Face-to-Face

Term (Post-transformation)	W	F	Total # of Students	Percentage
Fall 2015	5	6	64	17.18%
Spring 2016	17	5	97	22.68%
Total	22	11	161	20.49%

DFW rates Face-to-Face

3b. Narrative

For 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) for the Fall 2015 and 75 (out of 97) 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 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% 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 not be ready or are having difficulty striking work-life-school balance for the fast-paced and self-direction 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 student explicitly stated that they were withdrawing from the class because of the pace and workload. Other students requested to submit assignments, quizzes, and exams after the expressed deadline.

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.

Class Averages (Pre-transformation)	Spring 2015	Summer 2015	Combined Average
W1	71.23%	82.35%	76.79%
Class Averages (Post-transformation)	Spring 2016	Summer 2016	Combined Average
W1	77.32%	70.49%	73.9%

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%.

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

Class Averages Face-to-Face

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

In regards to qualitative data, 29 (26.85%) of the 108 respondents left comments in the survey. The major themes are concerned with the fact that the textbook was no cost to students. Of those 29 responses, 13 (12.03% of total respondents) mentioned the benefits of using OER materials. 9 (8.33% of total respondents) of the 29 responses mentioned the accessibility and usefulness of the OER 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. I have recommended the adoption of OER materials and shared the materials I have 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.

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. I intend to continue to collect data on the transformation for at least one more year. I'm curious to see if the DFW rates decrease for the online version in the Fall and Spring semesters. Survey questions need to 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.