ALG Adaptive Learning Pilot for Introduction to General Psychology

Final Report

To submit your Final Report, send this completed form in an email to Jeff Gallant ([jeff.gallant@usg.edu](mailto:jeff.gallant@usg.edu)) and Tiffani Reardon ([tiffani.reardon@usg.edu](mailto:tiffani.reardon@usg.edu)).

You can submit the following in this email **optionally**:

* Files with the data behind your Quantitative and Qualitative Measures narrative. These data files **will not be made available to the public** but may be provided to researchers in an anonymized version upon request.
* Your final invoice for the second half of the award: $1,000. Some institutions can send this early, while others will have to confirm that you sent in the Final Report before creating an invoice. Either way works for us.

Based on receipt of this report and your invoice (either with this form or submitted later), ALG will process the final payment for your grant. ALG will follow up in the future with post-project surveys and may also request your participation in a publication, presentation, or other event.

Please delete the descriptive text in italics when you fill out this form.

# General Information

**Date:** December 9, 2021

**Institution Name:** Clayton State University

**Participant Name:** Mark Daddona (in concert with Antoinette Miller, Nichelle Gause, and Chizara Jones)

**Total Number of Students Affected During Project:** 325

**Cost of Materials Replaced by Lumen Waymaker:** *$64.30-$82.85*

**Estimated Textbook Cost Savings Per Year (cost of previous materials minus cost of Waymaker):**

* Previous textbooks cost per textbooks for the 325 students would have been $20,887-$26,926.
* The cost for the same students using Waymaker was $35.71 per student, $11,605 total.
* The total savings was savings was $28-$47 per student, $9,282-$15,321 total.

**Are you going to continue the use of Lumen Waymaker in your General Psychology course after Fall 2021?:** Although I am not scheduled to teach PSYC 1101 during the upcoming spring or summer semesters, if I was scheduled to teach the course, I would use Waymaker again. The Department of Psychology will be using Waymaker at least through the Summer 2022.

# **Narrative**

First of all, to provide a context for my narrative, my PSYC 1101 class was fully-seated and met twice a week. As a result, I did not use as many of the additional course materials (discussions, assignments) that I would have if I taught the course as a hybrid or online only.

Overall, I had a very positive experience using Waymaker as opposed to an actual textbook from another publisher. I liked that all the materials (text, PowerPoints, quizzes, activities, assignments, etc.) were good quality and all in the same place in D2L. In the past, I’ve used textbooks with their own portal (LaunchPad, MindTap, etc.) which required students to create a separate account. Students then had two places to log into for course materials (D2L and the publisher portal). In the past, it seemed students often had difficulty navigating publisher portals.

As far as comments from my perspective as a faculty member, I prefer an actual textbook that I can read instead of having to read it online. I often like to have the textbook in class to refer to certain portions without having to shift from the PowerPoint presentation on the screen to the textbook online. I also like to annotate my copy of the textbook with notes and comments. I also prefer to add assignments and modules to the gradebook myself instead of having to hide or remove the items I don’t use in class. The gradebook ended up being too cluttered with assignments and quizzes that I didn’t use.

When I first introduced and demonstrated Waymaker at the beginning of the semester, students not only very much appreciated the low cost of the course materials, but were even more impressed with the fact that the department, university, and the University System of Georgia were concerned about student textbook costs and took the time and consideration to pursue viable alternatives. The text was written at an appropriate level for high school dual enrollment students and incoming freshmen so the amount, style, and vocabulary was a good match for the students. Although I never knew if the students took the time to watch the videos that are embedded in the text, I strongly encouraged them to since they really helped explain and demonstrate some of the material. When time allowed, I showed some of the videos in class. I believe the Waymaker materials had a positive impact on the performance of my students. Actual measures of success will be shared later in this report. One note I believe is worth sharing is that course attendance this semester has been poorer than course attendance in PSYC 1101 classes I taught in previous semesters. I think this is due to students still enrolling in most of their courses online this semester, and at times, chose not to come to campus for just one class, when in the past students typically would come to campus for several classes on the same day.

As far as lessons learned and things I might do differently in the future, a few things come to mind as the semester winds down. If I teach a fully seated section again, I plan to assign more or most of the module quizzes and allow students to drop a couple of the lowest quiz grades. I only assigned quizzes on some of the chapters, and some students forgot to take the quizzes, even after several reminders. If I assign quizzes on each module, students might get in the habit of taking a quiz each week. If I teach a hybrid or fully online section, I will definitely assign some of the discussion activities.

# **Quotes**

* “I like the resource as it is a great budget choice. The format and the design are easy to the eyes. However, as a personal preference, having a physical book in front of me is more effective to utilize.”
* “My Waymaker resource experience was positive because it felt like I had easier access to modules compared to trying to find them in textbooks, which would take longer. Along with Waymaker, they had self-check questions that you can do online that help you to study for exams.”
* “It was very easy to use this textbook, it was always accessible (never forgot your book at home), I liked the built in quizzes that tested your knowledge.”

# **Quantitative and Qualitative Measures**

## **Uniform Measurements Questions**

**Student Opinion of Materials**

**Was the overall student opinion about Waymaker used in this course positive, neutral, or negative?**

Total number of students affected in this project: 325 (201 returned surveys)

* Positive:    92.04 % of 201 respondents
* Neutral:     3.48 % of 201 respondents
* Negative:   4.48% of 201 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:

* \_\_\_ Positive: Higher performance outcomes measured over previous semester(s)
* \_X\_ 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?**

Choose One:

* \_\_\_ Positive: This is a lower percentage of students with D/F/W than previous semester(s)
* \_X\_ 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)

To address this, first see below historical DFW data (past 2 years) in our PSYC 1101 across various course modalities. There is a confound beginning in March of 2020, where all of our sections were abruptly shifted to online due to the pandemic. Since then the great majority of our PSYC 1101 sections have been online (although not all asynchronously) including during this pilot period. Previous to the pandemic we would have greater numbers of in-person (hybrid or seated) sections vs. online (at that time all asynchronous) sections.

**Historical data from past 2 years, broken down by course modality:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course modality** | **# Sections** | **# Students** | **%ABC** | **%DFW** |
| **Hybrid** | **6** | **249** | **78.56%** | **21.44%** |
| Fall 2019 | 3 | 129 | 80.33% | 19.67% |
| Spring 2020 | 3 | 120 | 76.78% | 23.22% |
| **Online** | **23** | **849** | **74.79%** | **25.21%** |
| Fall 2019 | 2 | 73 | 75.53% | 24.47% |
| Spring 2020\* | 2 | 75 | 81.20% | 18.80% |
| Fall 2020 | 11 | 388 | 72.02% | 27.98% |
| Spring 2021 | 8 | 313 | 76.81% | 23.19% |
| **Seated** | **6** | **221** | **82.55%** | **17.45%** |
| Fall 2019 | 3 | 126 | 82.55% | 17.45% |
| Spring 2020\* | 2 | 76 | 94.89% | 5.11% |
| Fall 2020 | 1 | 19 | 57.89% | 42.11% |
| **Grand Total** | **35** | **1319** | **76.76%** | **23.24%** |

\*all classes switched to entirely online in March 2020 due to pandemic

**Fall 2021 %ABC/DFWI rates:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Modality** | **# sections** | **# students** | **%ABC** | **%DFWI** |
| Hybrid | 1 | 38 | 68.42% | 31.58% |
| Online | 7 | 257 | 67.35% | 32.65% |
| Seated (Daddona) | 1 | 30 | 76.67% | 23.33% |
| **Grand Total** |  |  | **68.50%** | **31.50%** |

For my fully seated section, my DFWI rate of **23.33%** was lower than my fully seated section in Fall 2020, which was **42.11%.** However, Fall 2020 was also a unique semester because students in my section, due to their low standardized test scores, would have originally only been admitted to Clayton State University in the previous summer semester as part of the Summer Bridge Program. Since the university did not return to fully-seated classes until Fall 2020, the students were identified as Fall Bridge students, resulting in a comparative group that was not as academically prepared as the Fall 2021 class. It is fairer to compare the Fall 2021 DFWI rate to previous semester when I taught the course as indicated below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester** | **# Students** | **%ABC** | **%DFWI** |
| Spring 2016 | 61 | 93.18% | 8.20% |
| Fall 2016-01 | 58 | 93.10% | 6.90% |
| Fall 2016-02 | 38 | 94.74% | 5.26% |
| Spring 2017-01 | 60 | 93.33% | 6.67% |
| Spring 2017-02 | 59 | 81.36% | 18.64% |
| Fall 2020 | 19 | 57.89% | 42.11% |
| **Average** |  | **85.37%** | **14.63%** |

However, these comparisons are still not comparable. Due to COVID restrictions, Fall 2021 was still a semester different from other pre-COVID semesters. Due to social distancing, the 30 students were spread out in a large room that typically holds 60 students. This distance, along with facial masks, made it more difficult for students to connect with one another and with me as the instructor. Usually, I would take some time in class for students to pair-up and work on a project or assignment together, which I believe enhances learning.

## **Measures Narrative**

**Fall 2021 PSYC 1101 Demographics**

The following measures are helpful in further understanding our students, their demographics, and their responses to the survey we created at our institution.

***Per Institutional data***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Class Modality** | **% Pell Eligible** | **% Full Time Enrollment** | **Average Institutional GPA** | **Average Overall GPA** | **Total**  **# Students** |
| Hybrid | 63.2% | 14.72% | 2.64 | 2.36 | 38 |
| Online | 58.8% | 75.76% | 2.60 | 2.60 | 257 |
| Seated | 53.3% | 9.52% | 2.82 | 2.80 | 30 |
| **Grand Total** | **58.7%** | **71.1%** | **2.63** | **2.61** | **325** |

We also asked students to complete a survey during the final weeks of the semester which included both demographic and student opinion questions.

|  |  |  |
| --- | --- | --- |
| **Age Range** | **% of total** | **Choice Count** |
| 17 and under | 21.32% | 42 |
| 18-25 | 67.51% | 133 |
| 26- 39 | 8.63% | 17 |
| 40-65 | 1.52% | 3 |
| 66+ | 1.02% | 2 |
|  | **Total** | **197** |

|  |  |  |
| --- | --- | --- |
| **Gender** | **% of total** | **Choice Count** |
| Female | 76.88% | 153 |
| Male | 23.12% | 46 |
|  | **Total** | **199** |

|  |  |  |
| --- | --- | --- |
| **Race/Ethnicity** | **% of total** | **Choice Count** |
| African | 2.78% | 5 |
| Asian/Asian American | 11.67% | 21 |
| Biracial | 2.78% | 5 |
| Black/African American | 64.44% | 116 |
| Hispanic | 2.78% | 5 |
| Indigenous | 0.56% | 1 |
| Latinx | 2.22% | 4 |
| Multiracial | 1.11% | 2 |
| Other\* | 0.56% | 1 |
| West Indian | 1.11% | 2 |
| White/Caucasian | 0.56% | 18 |
|  | **Total** | **180** |

*\*Other= one respondent identified as “human”*

*\*\* Responses of N/A, None, etc. omitted, total of 17.*

|  |  |  |
| --- | --- | --- |
| **Please select the category that best describes your student type** | **% of total** | **Choice Count** |
| Dual-Enrollment (Currently in high school) | 27.14% | 54 |
| New Freshman | 36.18% | 72 |
| Native student (started as freshman and continuously enrolled) | 25.13% | 50 |
| Transfer student (not the 1st semester at Clayton State) | 11.56% | 23 |
|  | **Total** | **199** |

|  |  |  |
| --- | --- | --- |
| **Please select the category that best describes your current semester enrollment.** | **% of total** | **Choice Count** |
| Part-time student (taking 9 or less credit hours) | 31.34% | 63 |
| Full-time student (taking 12 or more credit hours) | 68.66% | 138 |
|  | **Total** | **201** |

|  |  |  |
| --- | --- | --- |
| **If you work, how many hours per week do you typically work?** | **% of total** | **Choice Count** |
| I do not work | 47.00% | 94 |
| 20 or less hours per week | 15.50% | 31 |
| 20 hours or more per week | 37.50% | 75 |
|  | **Total** | **200** |

|  |  |  |
| --- | --- | --- |
| **Which of the following best describes this course?** | **% of total** | **Choice Count** |
| Fully seated course, meet multiple times per week | 12.44% | 25 |
| Fully seated course, meet 1 time per week | 3.98% | 8 |
| Hybrid course, half online and meet 1 time per week | 2.99% | 6 |
| Fully online, no in class meetings | 80.60% | 162 |
|  | **Total** | **201** |

|  |  |  |
| --- | --- | --- |
| **Now that you completed a course using the Waymaker, how likely are you to recommend a friend enroll in PSYC 1101 based on your experience with the learning resource?** | **% of total** | **Choice Count** |
| Very likely | 65.00% | 130 |
| Somewhat likely | 16.50% | 33 |
| Likely | 14.00% | 28 |
| Not very likely | 4.00% | 8 |
| Not likely at all | 0.50% | 1 |
|  | **Total** | **200** |

|  |  |  |
| --- | --- | --- |
| **Which of the following is MOST TRUE for you?** | **% of total** | **Choice Count** |
| I read modules as assigned to prepare for class | 72.64% | 146 |
| I read ahead of schedule (ahead of the assigned readings for the upcoming week) | 15.92% | 32 |
| I only read the textbook right before the exam | 6.47% | 13 |
| I do not read the textbook | 4.98% | 10 |
|  | **Total** | **201** |

|  |  |  |
| --- | --- | --- |
| **Which of the following resources did you use/review, in addition to the textbook? Check all that apply** | **% of total** | **Choice Count** |
| Videos | 13.93% | 28 |
| Recommended Readings | 6.47% | 13 |
| Try It Questions | 11.94% | 24 |
| Self-Check Questions | 64.68% | 130 |
| I did not use any outside resources | 2.99% | 6 |
|  | **Total** | **201** |

|  |  |  |
| --- | --- | --- |
| **How would you rate the quality of the Waymaker resource as compared to books and/or resources used in other university classes?** | **% of total** | **Choice Count** |
| This book is the same quality as other books I have used | 75.00% | 150 |
| This book is of poorer quality than other books I have used | 3.00% | 6 |
| I have not used the book for this course | 4.50% | 9 |
| I have not used other university text books so I cannot compare | 17.50% | 35 |
|  | **Total** | **200** |

|  |  |  |
| --- | --- | --- |
| **How would you rate the ease of use for this low-cost learning resource compared to other online resources?** | **% of total** | **Choice Count** |
| This low-cost book is the same quality as other books I have purchased | 70.15% | 141 |
| This low-cost book is of poorer quality than other books I have purchased | 2.99% | 6 |
| I have not used the low-cost book for this course | 6.97% | 14 |
| I have not purchased other university text books so I cannot compare | 19.90% | 40 |
|  | **Total** | **201** |

|  |  |  |
| --- | --- | --- |
| **Did you use technical support for the platform?** | **% of total** | **Choice Count** |
| Yes | 11.94% | 24 |
| No | 88.06% | 177 |
|  | **Total** | **201** |

|  |  |  |
| --- | --- | --- |
| **My experience with the Waymaker resource was positive** | **% of total** | **Choice Count** |
| Strongly agree | 69.15% | 139 |
| Somewhat agree | 22.89% | 46 |
| Neither agree nor disagree | 3.48% | 7 |
| Somewhat disagree | 2.49% | 5 |
| Strongly disagree | 1.99% | 4 |
|  | **Total** | **201** |

# **Future Instruction Plans**

Our primary issue as a department with the Waymaker was the comparative lack of material/content/focus on multicultural aspects of the field vs. our most recent text. Our faculty with content expertise in the area have worked to pull together additional material and activities for the Spring 2022 semester, and we have also been in communication with Lumen regarding other improvements that may be possible to the Waymaker product itself and other resources that Lumen may be able to incorporate from other texts/courses they offer. If a textbook version of Waymaker is published in the near future, it will allow students the option to also purchase the book. It seems that many of our nontraditional students like to read from an actual textbook. Although OpenStax publishes a similar version, it does not completely match the Waymaker online text. As of this time, we plan to continue using Waymaker for all PSYC 1101 classes at least through Summer 2022.

# **Future Scholarship Plans**

At Clayton State University, our team of four faculty who piloted Luman Waymaker this semester obtained Institutional Review Board (IRB) approval to survey our own students about their experience with Luman Waymaker. Although plans are not definite at this time, we would like to submit a conference proposal at an appropriate upcoming conference. In addition, we might prepare and submit a paper for publication to share our experiences and findings from our student surveys.