Service-Learning Partnership Agreement and Project Description

Regents School of Austin

2017-2018 Academic Year

Regents School of Austin AP Statistics classes and Mobile Loaves and Fishes are entering into a partnership to create service-learning experiences in the community. The following document will outline the planned project, the agreed upon responsibilities of all parties involved, and evaluation criteria.

What is Service-Learning?

Service-learning is a set of activities that 1) enhance either the delivery or the impact of the curricular material, and 2) take place within a service framework where additional experience with civic engagement or social contribution will be obtained.[1] Service-learning is more than community service performed by students (overemphasizing point 2) and at the same time service-learning also goes beyond simply real-world applications of course content (overemphasizing point 1). Rather, service-learning is meant to develop higher-order critical thinking in a real-world context while engaging students in an academic environment that portrays service as integral to the objectives of the course and the larger purposes of education.

Service-Learning in the Context of AP Statistics

The content of AP Statistics includes the following major topics:
- Exploratory Data Analysis: Planning a study, including deciding what to measure and measurement methods that minimize bias.
- Data Collection: Exploring and describing data by searching for quantifiable patterns and departures from patterns.
- Probability: Anticipating patterns, which include producing models using probability theory and exploration of distributions.
- Statistical inference: Includes developing confidence intervals and performing tests of significance.

As a service-learning project, students in AP Statistics at Regents School of Austin will work with Mobile Loaves and Fishes to complete survey research. Students will utilize a survey instrument, conduct a survey, compile and code data, analyze data, and present the results. This project will synthesize the major concepts of experimental design, data analysis, and statistical inference in the real-world context of community service.

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[1] Hadlock, C.R. (2005). "Introduction and Overview." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

The Mission of Mobile Loaves and Fishes

Mobile Loaves and Fishes (MLF) is a homeless outreach ministry in Austin, Texas. MLF operates under a philosophy that homelessness is more than house-less-ness, it is rather a severe break in community from others. MLF has acquired land just outside of the city on which they are currently developing a community of affordable housing for the chronically homeless, known as Community First. Community First also has amenities such as a gardening center, animals such as chickens and goats, a clinic, and a workshop for MLF's microenterprise endeavors. Everything about the property is designed to foster a sense of complete community.

Project Overview with Mobile Loaves and Fishes

MLF will partner with the students in AP Statistics at Regents School of Austin to complete a study based largely on Bruce K. Alexander's "Rat Park" experiment.[2] Basically, seminal studies that had proven the addictiveness of drugs such as heroin (and others) had done so through administering the drug to rats in cages in isolation. Alexander set up a study in which the rats were allowed to operate in community and found that the amount of drugs consumed went down drastically, indicating that environment and community (or lack thereof) can play a significant role in drug use. MLF is interested in seeing if the residents of Community First will have the same response as the rats of "Rat Park."

MLF is interested in having students survey the residents of Community First on issues related to their life on the streets (physical, psychological, and spiritual) prior to moving to the new community and how those issues have changed since moving onto the property and into the community. So for instance, has the drug use among the occupants of the property significantly decreased in comparison to their life on the streets in isolation? With this basic premise, the students will be tasked with developing the complete survey methodology and performing the appropriate analysis as part of the service-learning project.

Terms of Partnership Agreement

The students agree to:
- Actively participate in acquiring knowledge about MLF and its mission and orienting themselves to the history and purpose of the Community First development
- View the MLF representative as a co-instructor for this portion of the course and the client to whom they are ultimately responsible to. Students will show MLF representatives due respect at all times and in all forms of communication.
- Apply their knowledge of statistics to develop a survey instrument, conduct the survey, compile and code data, analyze data, and present the results in both oral and written form to representatives from MLF.

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[2] As referenced in Hari, J. (2015). *Chasing the scream: the first and last days of the war on drugs*. New York, NY: Bloomsbury, p. 170ff. See also: "The effect of housing and gender on Morphine self-administration in rats." *Psychopharmacology*. 58, pp. 175-179. and "Effect of early and later colony housing on oral ingestion of morphine by rats." *Pharmacology, Biochemistry, and Behaviour*, Vol. 15, pp. 571-576.

The faculty representative, Dr. Josh Wilkerson, agrees to:
- Provide for the students an appropriate orientation to the community experience and learning goals of the project as well as ongoing support.
- Equip students with the necessary statistical skills for successfully completing the project in way that is meaningful to MLF.
- Provide for MLF appropriate background information on service-learning and the learning objectives of the course applied in the context of the project.
- Act as a facilitator in the relationship between the students and MLF, ensuring that appropriate communication is occurring from both parties and that the project deadlines are met.
- Assess the students' attainment of learning objectives for the course and for the project.

The community partner, MLF, representative agrees to:
- Provide appropriate orientation to MLF and its mission through Community First by meeting with the students in person prior to the start of the project
- Provide ongoing support to the students and faculty representative as needed through the course of the project.
- Facilitate access to Community First residents for purposes of gathering survey data.
- Participate in the assessment of the students' effectiveness and the project's impact on MLF and Community First.

# Statistics Service Project Rubric – Spring Semester

Journal Entries	100	
Journal Entry 1 – Due 2/5	10	
Journal Entry 2 – Due	10	
Journal Entry 3 – Due	10	
Journal Entry 4 – Due:	10	
Journal Entry 5 – Due:	10	
Journal Entry 6 – Due:	10	
Journal Entry 7 – Due:	10	
Journal Entry 8 – Due:	10	
Journal Entry 9 – Due:	10	
Journal Entry 10 – Due:	10	
Written Proposal (see detailed rubric)	**25**	
Due:		
Final Report (see detailed rubric)	**75**	
Due:		
Total	**200**	

In addition to the written assignments submitted for grading (listed above), students are expected to participate in administering the survey at Community First on _____ and in the presentation of project results on _____.

Please notify Mr. Wilkerson as soon as possible if you have a conflict with either of these dates once they are set.

How to Complete your Reflection Journal

1. Log in to Google Drive using your SCHOOL email account. Create a new Google Doc.
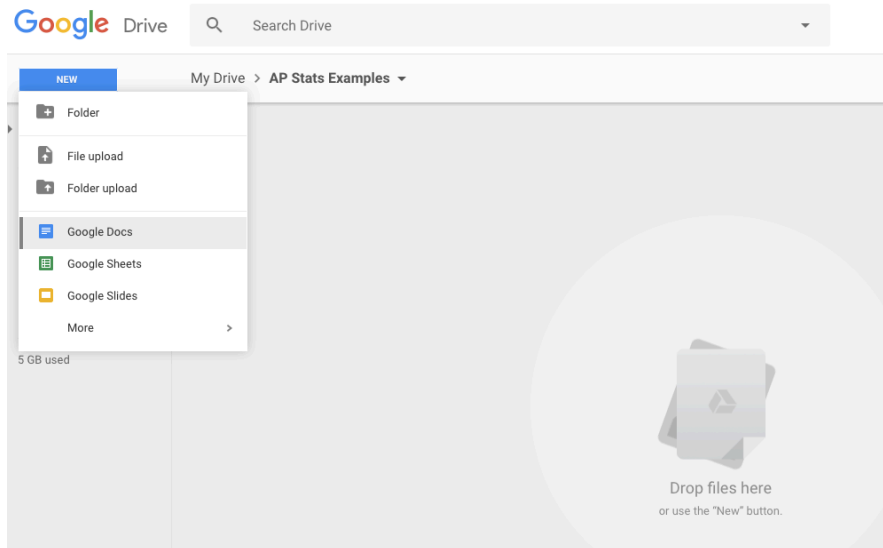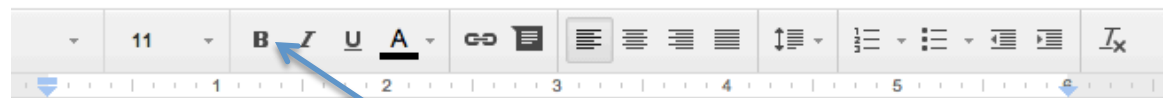

2. Name the document: Last Name, First Name – AP Stats Reflection Journal. The first three lines of text (left aligned with default font size and spacing) should be your name, AP Statistics 2016-17, and "Service-Learning Reflection Journal" as seen below.
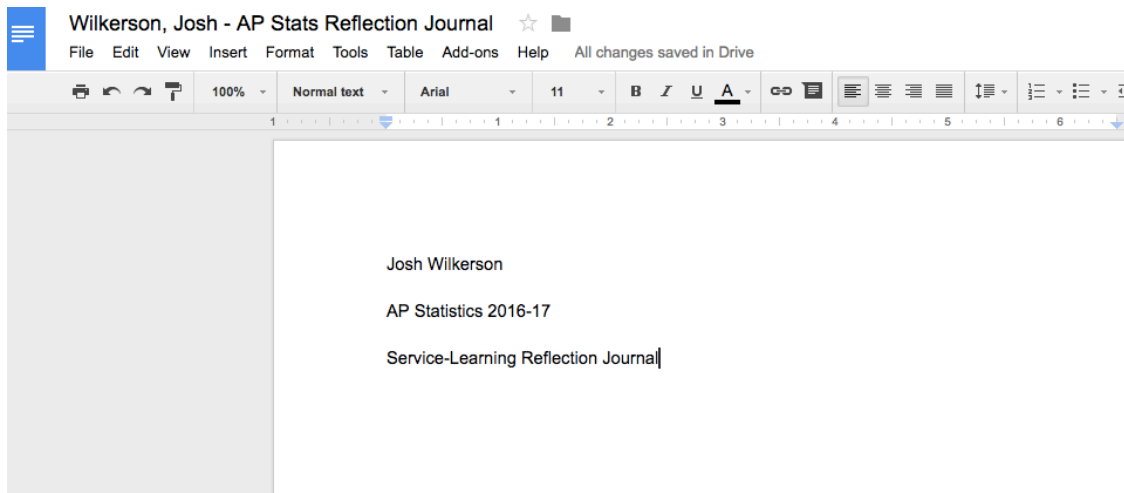
3. Share the document with me (jwilkerson@regentsaustin.org) and be sure it is set so that I can edit the document. **DO NOT** download the document or convert it to Word format or email it. Leave the document as a Google doc. All edits will be made online for the semester.
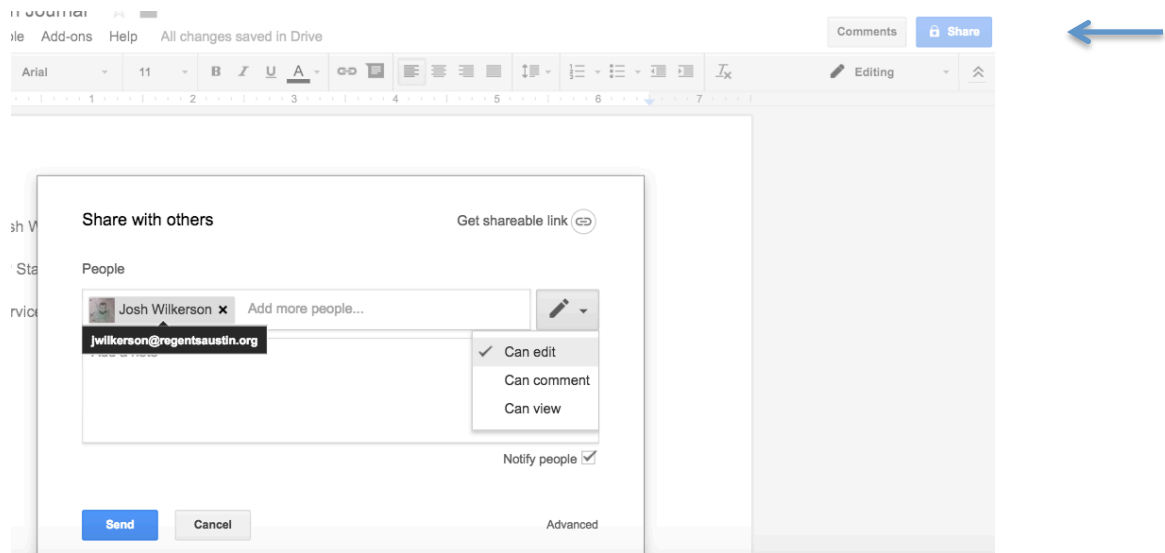
4. The prompts that you will respond to will be posted to our Google classroom page at the beginning of the week when they are due. To make your first entry, leave two lines blank under the heading and then write "Journal Entry 1 – October 19" in **bold** text (all future entries will start with the same format: Journal Entry # - Date due written as Month ##). Enter twice to leave on blank line and then type your response.

5. Each successive entry should start with the initial line "Journal Entry # - Date" in **bold** font, double-spaced beneath the last line of the previous entry.

Mr. Wilkerson

AP Statistics 2015-16

Service-Learning Reflection Journal

Journal Entry 1 - October 19

Type type type, typeity typeity typetiy and period. Type type type... and now random lorem ipsum generator: Lorem ipsum dolor sit amet, ne minimum aliquando mediocritatem vel, duo ei homero feugiat albucius. Hinc illud tation in has, id has ornatus noluisse theophrastus. Te intellegam sadipscing quo, his te meis sapientem repudiandae. Eam ea minim luptatum, his illum dicant comprehensam ut.

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Journal Entry 2 - October 26

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