OER Revisions and Ancillary Materials Creation Mini-Grant Application

Affordable Learning Georgia aims to support the sustainability of previous Textbook Transformation Grants implementations through revisions of created open educational resources or the creation of new ancillary materials for existing OER. Mini-grant participants do not need to be the original creators of the resource(s). While we welcome original authors to revise their original materials, the nature of open licenses allows for the revision and remixing of OER materials by anyone as long as the terms of the license are adhered to.

The final deliverable for this category is the revised or newly-created materials as proposed in the application, which will be hosted through GALILEO Open Learning Materials. All revised or newly-created materials will be made available to the public under a Creative Commons Attribution License (CC-BY), unless the original materials were under a more restrictive license such as the inclusion of SA (Share-Alike) or NC (Non-Commercial).

For the purposes of this grant, we define revision as the major improvement of a resource through updates for accuracy, accessibility, clarity, design, and formatting. We define ancillary materials as any materials created to substantially support the instruction of a course using an existing open educational resource(s).

While mini-grants do not normally require the Letter of Support process that larger Textbook Transformation Grants require, multi-institution collaborations on a mini-grant project do require a Letter of Support from each institution. This is to ensure that not only the Project Lead's institution is aware of the grant.

Applicant Name *

Sherry L. Serdikoff, PhD, BCBA-D, CP

Applicant Position *

Associate Professor

Applicant Institution *

Savannah State University

Applicant Email Address *

Please use your institutional email address.

serdikoffs@savannahstae.edu

Other Team Members

Please provide both names and email addresses here.

Type of Project *

- (●) Revision of pre-existing OER
- ( ) Creation of ancillaries for pre-existing OER
- ( ) Other:

Course Number(s)

BEHV 2106 & BEHV 2107

Course Title(s)

research Design and Data Analysis I; Reserch Design nad Data Analysis II

Final Semester of the Project *

This is the semester in which the materials created/revised will be completed.

- ○ Fall 2020
- ◉ Spring 2021

Proposed Grant Funding Amount: *

This is the total (in a dollar amount) of funding you are requesting for the mini-grant. There is a maximum of $4800, with a maximum of $2000 per team member and $800 for project expenses.

$2800.00

Currently-Existing Resource(s) to be Revised / Ancillaries Created *

Please provide a title and web address (URL) to each of the currently-existing resources that you are either revising or creating new ancillary materials for below.

I will be revising and remixing information from the sources listed below to create a new integrated research methods and statistics text:

Crump, M. J. C., Navarro, D., & Suzuki, J. (2019). Answering Questions with Data: Introductory Statistics for Psychology Students. https://doi.org/10.17605/OSF.IO/JZE52 . CC BY-SA 4.0 license.

Dierker, L. (2019). Passion Driven Statistics. https://www.dropbox.com/s/s3boimk7hag2061/Passion-driven%20Statistics%202nd%20Edition.pdf?dl=0. CC BY-NC-SA 4.0 license.

Foster, G. C., Lane, D., Scott, D., Hebl, M., Guerra, R., Osherson, D., & Zimmer, H. (2018). An Introduction to Psychological Statistics. https://irl.umsl.edu/cgi/viewcontent.cgi?article=1000&context=oer . CC BY-NC-SA 4.0 license.

Jhangiani R. S., Chiang, I. A., Cuttler, C., & Leighton, D. C. (2019). Research Methods in Psychology (4th Ed.). https://kpu.pressbooks.pub/psychmethods4e/. CC BY-NC-SA 4.0 license.

Navarro, D. (2018) Learning Statistics with R: A Tutorial for Psychology Students and Other Beginners. http://compcogscisydney.org/lsr/lsr-0.6.pdf. CC BY-SA 4.0 license.

Project Description *

In at least one paragraph, describe your project's goals and deliverables.

The statistics and research methods courses are among the most challenging in the curriculum across the social and behavioral sciences. Historically, the content is taught in two separate courses where students learn statistical content, which has a heavy emphasis on mathematical content, in one semester followed by research methods content, which has a heavy focus on writing research reports, in another semester. As noted by Baron, Benedict, Saville, Serdikoff, and Zinn (2007), a common critique of this approach is that students lack the necessary context to appreciate why they are learning about different tools in the statistics course and why knowing how to use these tools will be beneficial to them. An analogy that captures the essence of this arrangement is putting the cart before the horse. Students learn the tools to answer research questions before being taught what research is and why it is an integral part of behavioral science. In recent years a new variation has emerged; a two-semester course sequence that integrates the statistics and research methods content. With this integrated arrangement, students shift in and out of units on research methods and statistics each semester. First students learn a particular research design and what questions can be answered with that design. Then they learn the statistical tools used to analyze the data and draw conclusions from that design. (Baron et al., 2007; Van Buuren, 2006). Students engage in hand-on projects throughout both semesters to practice using the designs and analyzing the data and they learn how to disseminate research in various formats, most notably in the form of APA style research report (APA, 2019). With an eye toward support University System of Georgia efforts to reduce barriers to success (the statistics class being one for our students), Savannah State University recently approved curriculum proposals to two such courses (BEHV 2016, Research Design and Data Analysis I and BEHV 2017, Research Design and Data Analysis II) as a part of the Behavior Analysis major curriculum to replace the more traditional statistics and research methods course (BEHV 2013 & 2014) beginning in Fall 2020.

With growth in the number of institutions offering this new integrated approach, there have been numerous texts published that target this audience. For example, two recent releases include Research Methods and Statistics: An Integrated Approach (Wilson & Joye, 2017) and Research Methods and Statistics in Psychology (Beins & McCarthy, 2018). Notably missing from the possibilities is an OER option. There are, however, available OER resources for the traditional separate research methods and statistics courses. As such, the goal of this project is to revise and remix existing OER materials to create an OER integrated research methods and statistics text.

References

American Psychological Association. (2020). Publication Manual of the American Psychological Association (7th ed.).

Baron, K. E., Benedict, J. O. Saville, B, K. Serdikoff, S. L., & Zinn, T. E (2007). Innovative approached to teaching statistics and research methods: Just-in-time teaching, interteaching, and learning communities. In D. S. Dunn, R. A. Smith, & B. C. Beins (Eds.) Best Practices for Teaching Statistics and Research Methods in the Behavioral Sciences. Lawrence Erlbaum Associates.

Beins, B. C. & McCarthy, M. A. (2018). Research Methods and Statistics in Psychology (2nd ed). Cambridge University Press.

Wilson, J. H. Shauna W. Joye, S. W. (2017). Research Methods and Statistics:An Integrated Approach, Sage

Publications.

Van Buuren, H. (2006). Teaching statistics and research methods: An integrated approach. In A. Rossman & B. Chance (Eds.), Proceedings of the Seventh International Conference on Teaching Statistics, ICOTS7. Salvador: International Association for Statistics Education. https://www.researchgate.net/publication/228642239_Teaching_statistics_and_research_methods_An_integrated_approach

Timeline and Personnel *

Provide a project timeline with milestones below, keeping in mind your selected Final Semester above. Provide a short description of the roles any additional team members will take on during the activities in your timeline.

The grant applicant is the only personnel. The project will begin in the summer of 2020 and continue through the 2020-2021 academic year, culminating in Spring 2021. During summer 2020, the goal will be to begin reviewing, revising and integrating the materials. The deliverable for this first phase of the project will be a draft the OER resource that will be adopted for use as the primary text in BEHV 2106 and BEHV 2107, Research Design and Data Analysis I & II, which will be taught for the first time at Savannah State University during fall 2020. The OER book will be revised based on assessment outcomes and feedback from students during fall 2020 and a revised version will be adopted as the primary text in BEHV 2106 and BEHV 2107 in spring 2021. Additional revisions will be based on assessment outcomes and feedback from students during spring 2021. The full OER text will be completed at the end of the spring 2021 semester and ready for distribution, adoption, and use by other social and behavior science instructors.

Budget *

Please enter your project's budget below. Include personnel and projected expenses. The maximum amounts for the award are as follows: $4,800 maximum award, $2,000 maximum per team member, $800 maximum for overall project expenses. Unlike standard-scale and large-scale transformations, the maximum of $800 is not a required element of the budget, but rather meant primarily for the purchase of specific tools and software which would help with improving resources.

Budget Justification: The primary resource being funded is faculty time to review, revise, and remix OER resources during summer 2020 so that a draft of the new OER is ready adoption/implementation in fall 2020. The project expenses include purchasing a publication plan and project-related travel. The Pressbooks PDF + EBOOK Pro plan (https://passiondrivenstatistics.com/) will allow for the development of a professional quality product as well as provide enough storage for project related files, some of which are likely to be large (data files, graphs, statistical analysis code and output, etc.). This software was chosen in consultation with Affordable Learning Georgia program manager Jeff Gallant. The remaining project expenses represent projected costs for travel to San Diego to attend a Passion Driven Statistics Workshop. Passion-Driven Statistics (https://passiondrivenstatistics.com/) is an a National Science Foundation (NSF) funded project that includes OER resources that will be included in the proposed project. They offer faculty workshops each year and I plan to attend one while developing my product (specifics to be determined; the 2020 schedule is not yet posted).

The budget, developed in consultation with N. Riggs in SSU's Office Sponsored Research Administration, appears below.

Salary
Serdikoff $1,696
Fringe $304
Project Expenses:
Pressbooks PDF + EBOOK Pro Plan - DIY book design and production software, chosen in consultation with Jeff Gallant, program manager of Affordable Learning Georgia, (https://pressbooks.com/self-publishers/) $99
Travel to San Diego for Passion Driven Statistics Workshop (https://passiondrivenstatistics.com/) $701
Total Direct $2,800
Indirect - not allowed $0
Total funds requested $2,800

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- [x] I understand that any new materials or revisions created with ALG funding will, by default, be made available to the public under a Creative Commons Attribution License (CC-BY), with exceptions for modifications of pre-existing resources with a more restrictive license.