

Teaching and Employing Open Science Practices at Small Liberal Arts Colleges

Workshop leaders:

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Proposed Location:

Carleton College, August 10-11, 2020

Workshop Description

The "replication crisis" in psychology has spurred a growing open science movement that has developed new methods and best practices supporting reproducibility, replicability, and robustness of research. These approaches to scholarship, such as preregistration of study hypotheses, increased transparency (e.g., open materials, data, statistical code), large multi-site collaborations, innovative publishing models (e.g., registered reports; open-access journals) are revolutionizing how researchers are conducting research and training students, and interest in open science has exploded (e.g., 100 scholars attended the first Society for Improving Psychological Science (SIPS) conference in 2016 and over 500 are anticipated for the 2019 meeting).

While these advances are tremendously exciting and transformative, much of the momentum has been concentrated in large research institutions with graduate programs. For a number of reasons, faculty and students at smaller undergraduate colleges have not been exposed to these new approaches as readily as colleagues at larger universities. To enable faculty at top liberal arts institutions to continue to produce research at the forefront of the field and train students to do so as well, it is beneficial to provide opportunities to engage with these advances. **Therefore we are proposing an AALAC workshop on open science practices in psychology.**

The goal of the proposed workshop is to **bring together faculty across career stages and subdisciplines within psychology to learn from each other by sharing resources, strategies, and concerns about doing open science with undergraduates in a collaborative and interactive space.** The workshop will include:

1. presentations by the organizers, participants, and an outside speaker about the current state of the replication crisis, how the field has responded to it, and opportunities for faculty at AALAC schools;
2. hands-on workshops on sharing data, code, and materials using reproducible and open-source methods;

3. discussions of how to incorporate open science practices in coursework, including opportunities for participants to revise existing assignments from their courses; and
4. smaller mentoring sessions where faculty from particular groups (e.g., one subdiscipline, junior faculty, etc) can discuss open-science practices specific to their groups.

We envision that the potential outcomes of the workshop will include shared teaching materials, lab manuals, or other resources tailored to faculty and students at AALAC schools, along with building collaborations on other forms of scholarship in open science. In addition, there are opportunities for "two-way" mentoring, with junior scholars, who typically have more experience with open science, connecting with senior colleagues who have successfully navigated their careers at liberal arts institutions. Additionally, after the 2018 SIPS conference, we formed a discussion group for faculty at small departments interested in open science, and we will encourage AALAC colleagues to join this group to enable continued collaboration and resource sharing. We also plan to arrange meetings among workshop attendees at the professional conferences we attend the following year.