

Collaborative Replications and Education Project (CREP): Teaching Scientific Transparency in Methods Classes



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Background

The Collaborative Replications and Education Project (CREP) is a crowdsourced replication project for undergraduate students.

Hosted on the Open Science Framework (<https://osf.io/wfc6u/>), the CREP started in 2013 as a mechanism of addressing students' and teachers' needs for hands on research experience.

CREP process intended to train future scientists is best practices in transparency and is the only open invitation meta-science project developed specifically for student contributors.

Objectives

- Increase openness and transparency in research.
- Facilitate undergraduate research training.
- Provide *Research Methods* instructors with a scaffolded research project for classroom use
- Provide reportable outcomes for instructors in tenure and promotion process.
- Provide generalizable meta-analytic estimates of published research findings.

Methods

Currently, the CREP recommends eight different studies for student replication. The studies were chosen by assessing for:

1. most cited paper in a recent year
2. feasibility for student replication

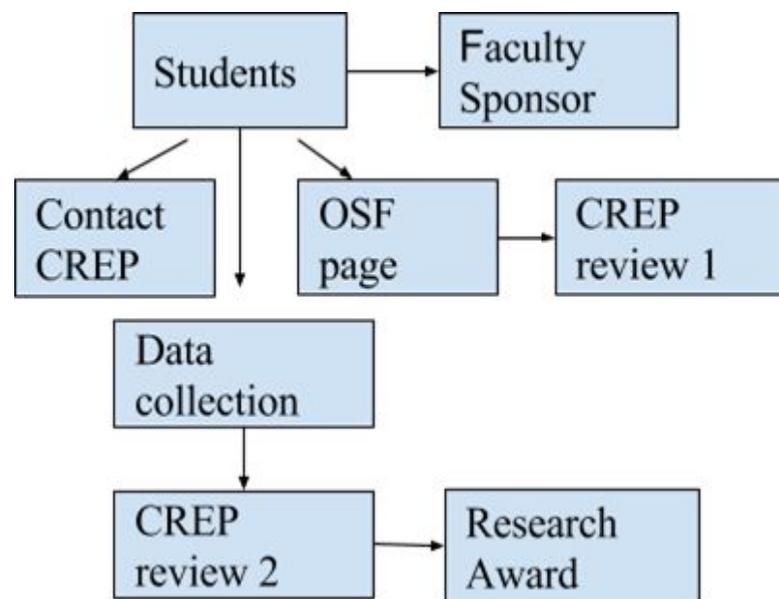


Figure 1. CREP workflow

CREP review 1 -- Team of 3 PhD CREPers review the overall Wiki, materials and video of procedure before data collection

CREP review 2 -- Team of 3 PhD CREPers review the data and results component to verify that the appropriate statistics were conducted and reported

Student experience at both reviews steps models the journal submission process with a “revise and resubmit” decision letter.

Results

CREP Project Status

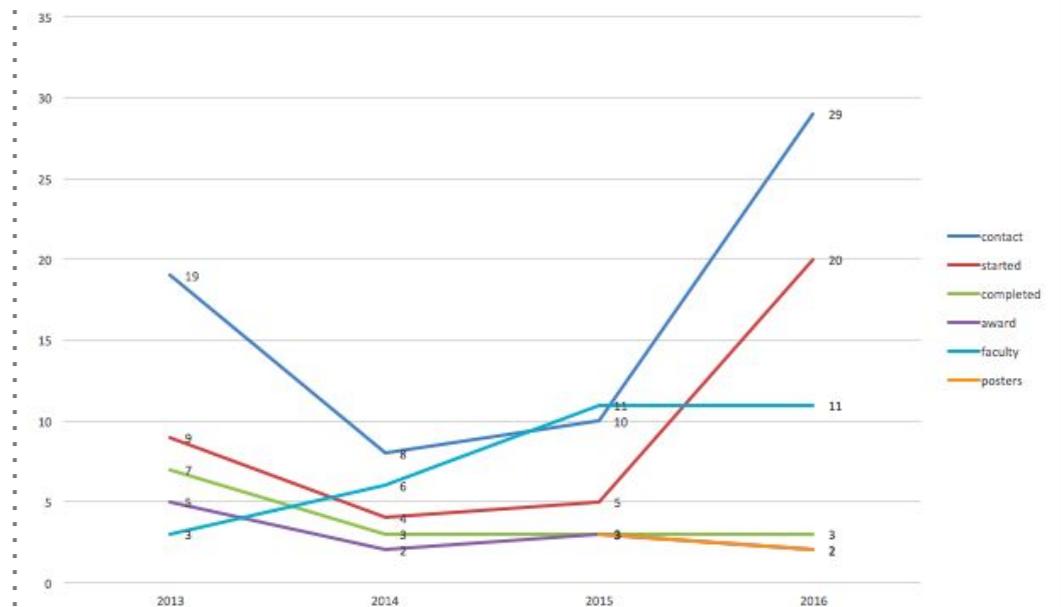


Figure 2. CREP Statistics 2013-2016

Contact -- if student or faculty expressed interest in completing a CREP project

Started -- if student or faculty created an OSF page

Completed -- if data collection occurred and results presented on OSF page

Award -- if the project received a CREP Research Award

Faculty -- number of faculty participating in the CREP as reviewers

Posters --- how many CREP projects presented at APA regional conference

Acknowledgments

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