

Interdisciplinary collaboration and Community-Engaged Learning During Covid 19

Part of the Collaborating Across Boundaries Project Kim Pearson, Monisha Pulimood, Diane Bates AEJMC panel on high-impact practices

August 5, 2021





The challenges posed by the pandemic

- Coincided with NSF-supported CAB study
- CAB model relied heavily on in-person interaction
- Had to quickly develop strategies for interaction across classes
- Had to figure out how to do community engagement remotely
- Added a new variable to consider in reviewing our data and methods









Collaborating Across Boundaries to Engage Undergraduates in STEM Learning PIs: Monisha Pulimood (Computer Science), Diane Bates (Sociology), Kim Pearson (Journalism)

Research Questions

- 1. Did the CAB model identify best practices for interdisciplinary, community-engaged pedagogies that allow faculty members to harmonize cultures that differ across disciplines and between the classroom and the community?
- 2. Is the CAB model an effective method of improving undergraduate STEM education across different majors, and for which majors is it most effective?
- 3. What combinations of courses are most effective for STEM learning in the CAB model?
- 4. Does the CAB model improve STEM learning among historically underrepresented student groups?
- 5. What types of combined community engaged learning (CEL) projects are best for improving learning outcomes for STEM and non-STEM majors?

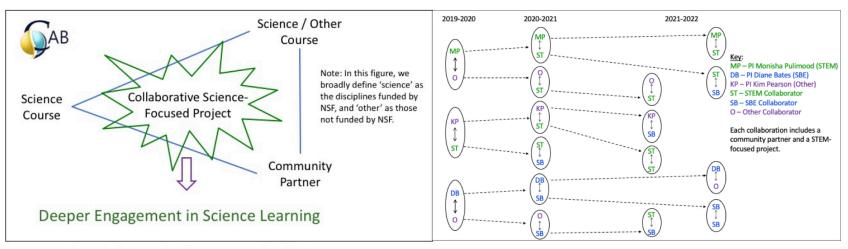


Figure 1: Collaborating Across Boundaries (CAB) Model

Figure 2: Expanding Disciplinary Group Collaborations









CAB journalism collaborations

- Spring 2020
 - JPW/AAS 321: Race, Gender and the News (18 students)
 - CS 315: Database Systems (38 students)
 - Community partner: NJ Sustainability Reporting Hub
 - Project website redesign, content development
- Spring 2021
 - JPW/AAS 321:Race, Gender and the News (15 students)
 - ANT 341 Environmental Anthropology (23 students)
 - Community partner: FreePress News Voices
 - Project: How should the news media cover food justice?







Adjustments



Spring, 2020: Zoom, adjustments in deadlines and grading Spring, 2021:

- Creation of "lab sections" (all CAB sections)
- Detailed project brief developed with partner and shared across classes
- Weekly team check-in/check-out surveys
- Weekly meeting between collaborating faculty







Outcomes

New Jersey Sustainability Reporting Hub



Select a county to view stories from NJ newsrooms and other news sources

Spring, 2020

- Partner adopted some website redesign recommendations
- Reporting projects were less successful
- Student illnesses, shutdowns, tech problems were significant Spring, 2021
- All five teams completed webinars, ethnographic interviews
 - http://pearson.immtcnj.com/wordpress/snowball/how-should-the-news-media-cover-food-justice-issues/
- Community partner distributing executive summary
- Students report greater self-efficacy in science literacy







Reflections for AY 2021-22

Useful practices to continue

- "Lab section" with project briefs, materials, check-in sheets
- Weekly partner faculty meetings
- Webinar assignment for complex topics

Practices to adopt/modify

• More explicit connection between the concepts to be learned from partner discipline and what we are testing? Further insights to emerge from data analysis, which is ongoing.







More information:

- CAB Portal: https://tardis.hpc.tcnj.edu/cabportal/Home.php
- CAB Portal Twitter: https://twitter.com/cab_portal
- Teaching partnerships story map https://bit.ly/3xmCCAk
- Research note: Diane Bates, et. al. "Interdisciplinary and community collaboration through the transition to distance learning caused by the Covid-19 Pandemic" Science Education and Civic Engagement, Summer, 2020, pgs. 10-12
- Me: kpearson@tcnj.edu, @professorkim, kimpearson.net THANK YOU!



