Improving student outcomes in large-enrollment classes via anti-racist approaches

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Process

Ten large-enrollment Berkeley classes were intensively workshopped during summer 2022 through the use of the recently-developed guide, “Advancing Inclusion and Anti-Racism in the College Classroom: A rubric and resource guide for instructors” [https://zenodo.org/record/5874656](https://zenodo.org/record/5874656). Graduate assistants with pedagogy or disciplinary expertise were paired with faculty/lecturer/staff to collaboratively apply the tool and develop specific and actionable plans for course improvement in future semesters. All faculty/lecturer/staff volunteered their time and participations; all graduate assistants were competitively recruited via open search and compensated for their time. Benjamin Blonder (ESPM asst prof) coordinated the recruitment process and the operation of the learning community. Lucy Andrews (ESPM PhD student) provided additional paid facilitation and organization support. Further assessment work on long-term outcomes across courses will be led by IB PhD student Ali Bhatti with support from The American Cultures Center.

Participants

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Graduate Student(s)</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>NUSCTX 166: Nutrition in the Community</td>
<td>Adenike Omomukuyo</td>
<td>Mary Lesser</td>
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<tr>
<td>NUSCTX 104AC: Food, Culture, and the Environment</td>
<td>Adenike Omomukuyo</td>
<td>Kristen Rasmussen</td>
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<td>ESPM 50AC: Introduction to Cultural and Natural Resource Management</td>
<td>Marina Stern</td>
<td>Kurt Spreyer</td>
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<td>ENERES 160/ESPM 176: Climate Justice</td>
<td>Jaye Mejía-Duwan</td>
<td>Meg Mills-Novoa</td>
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<td>ESPM C115C: Fish Ecology</td>
<td>Lucy Andrews</td>
<td>Stephanie Carlson</td>
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<tr>
<td>ESPM C115A / IB C171: Freshwater Ecology</td>
<td>Lucy Andrews</td>
<td>Albert Ruhi</td>
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<tr>
<td>ESPM C114: Wildlife Ecology</td>
<td>Lucy Andrews</td>
<td>Justin Brashares</td>
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<tr>
<td>ESPM C46: Climate Change and the Future of California</td>
<td>Ja’Nya Banks</td>
<td>Whendee Silver, David Sedlak</td>
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<tr>
<td>IB 35AC: Human Biological Variation</td>
<td>Francisca Catalan</td>
<td>Rasmus Nielsen</td>
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Short-term outcomes

- 100% of surveyed participants felt the effort was impactful and merited the financial costs
- Extensive learning of key concepts through peer discussions, as well as discussion of common issues and impactful strategies for addressing them
- All classes applied the full tool and determined which Level I / II targets were being met
- Specific actions implemented (summarized across all courses) included:
  - Pre-course surveys
  - Increased small-group work and peer discussions during lecture slots
  - Resources for study skills
  - Training materials for new graduate student instructors on anti-racism topics
  - Language and tone changes in syllabus, especially around basic needs and accessibility
  - Course material centered towards students’ experiences
  - Community guidelines
  - Instructor positionality statements
  - Grading rubrics for major assignments
  - New grading schemes (e.g. specifications-based grading)
  - Inclusion of more decolonial, justice-centered, and/or Indigenous perspectives in course materials
  - More accessible office hours and methods for students to contact instructors
  - Deeper community engagement in assignments
  - Generation of teaching materials to assist reviewing concepts and terms via different learning modalities

- Valuable aspects of the summer work included:
  - Talking through questions/challenges with teaching peers!
  - Resources collected by Ali and Ja’Nya, learning about literature and theory
  - Participating in a group format, engaging with multiple stakeholders, doing work that felt immediately impactful and necessary, learning more about theory and how it applies to our educational contexts
  - I appreciated the range of topics that we covered during our “big” group meetings, including the associated readings. The follow up discussions with the larger group were always insightful and impactful. I learned a lot.
  - The graduate student leadership and the structure this provided to keep everyone accountable to GET. THINGS. DONE
  - Hearing that other instructors have similar challenges
  - The structure and time afforded by working with a grad student on syllabus redesign.
  - Ideas on how to change the courses
  - The ability to openly share and discuss each topic/focus area with other educators (faculty & graduate students)
Short-term outcomes (continued)

- In the future participants wanted:
  - Greater exploration of roles in the classroom (instructor positioning, grad student positioning, who our undergrads are and what they bring, etc.) could have been cool. (I also wonder about this as a space to build faculty-grad student solidarity about working conditions - that was implicit but what could it have been explicitly?) But also, the community schedule already felt rich and packed!
  - Panel discussion centering black students’ experiences
  - Thinking about a way to publicize these efforts to the campus and beyond. Publication, conference presentation, talk, article, anything to spread the word.
  - “inclusive pedagogical practices and/or PRACTICE with those in particular. It’s one thing to say we’ll put in peer learning groups in lecture, and another thing to give training to faculty on how to implement that (for example). Or one thing to include diverse examples and another to have faculty reconsider their goals and explicitly explain them to students while sharing these examples... perhaps there are other examples.
  - Case studies of challenges and work together on creative solutions for them?
  - I would love to see some exchange among instructors around alternative rubrics, assignments, syllabi
  - With not having much background in this, I felt the topics were useful/appropriate. If more time allowed, perhaps having more focused discussions on certain subjects/areas of study.
  - More time! I unfortunately had a busy summer and had previously scheduled events where I could not attend all of the sessions. I really enjoyed being a part of the group and felt like the discussions were fruitful and provided others’ perspectives and insight into similar challenges/observations/questions/etc. I had/experienced. Perhaps stretching this over the course of a year with a monthly commitment could be a possibility.
  - Getting full participation was hard - I wish more people could have attended.
  - Teams given some examples of possible outcomes to focus work
  - Somehow, some way having a common assessment structure built into the community. All of us working towards some common goal that is measurable. Doesn’t have to be quantitative necessarily, but something in which we all can see growth in ourselves, our courses, and/or our students.
  - I thought the mix of structured discussions around particular topics with the big group, combined with more focused work with the small teams, was an efficient and effective structure. I appreciated the chance to “see” examples of specific changes - perhaps there is a way to continue building on that?
  - “Our weekly meetings with the class were amazing. However, I was really confused early in the summer about the Thursday meetings, what they entailed, and the goals. So, I didn’t go. I also worked with a really big class and a really big team as a result, so having that external community may have felt more burdensome to me than for folks with other classes....
  - The weekly meeting I think could be organized into some affinity groups so that we could really drill down on particularly facets of this project that were especially meaningful to us.
Graduate Student Bios

Ali Bhatti (he/him)
I'm currently a third year PhD student researching how we can make undergraduate STEM education more inclusive, interpersonal, and interdisciplinary using bioinspired design. I love sports, so you can catch me on the basketball court missing wide open shots or turning off the TV in frustration as my favorite teams (Nets, Mets, AC Milan) maintain their mediocrity.

Ja’Nya Banks (she/her)
My name is Ja’Nya Banks. I am a current PhD student in the Education Policy, Politics and Leadership Program. Prior to Berkeley I studied and worked as a research assistant and racial identity facilitator at the University of Pennsylvania. I am a former Special Education teacher and proud native Marylander.

Jaye Mejía-Duwan (they/them)
I am a second-year PhD student studying the intersections of queer-of-color ecology, ecofeminism, and disability justice. I am involved in numerous equity initiatives on campus and am passionate about teaching and mentoring underrepresented students.

Marina Stern (she/her)
My name is Marina and I am in the first year of the Master’s of Landscape Architecture Environmental Planning program. I hope to work in wetland and shoreline habitat restoration within social contexts, planning and designing for environmental justice and social equity issues.

Lucy Andrews (she/her)
I just finished my fourth year in the ESPM PhD program. I research ways to adapt California water and hydraulic infrastructure management to climate change and the needs of freshwater ecosystems. I love teaching (even more than research! shhh), particularly with methods rooted in contemplative and nonviolent pedagogy, disability justice, and alternative grading structures (e.g. specification grading or labor-based grading). I've taught courses on natural resource management and supported undergraduates in community-based environmental justice projects. I also get a kick out of running absurdly far distances for reasons that don't make sense even to me.
Graduate Student Bios (continued)

Nike Omomukuyo (she/her)
I am a first-generation Nigerian-American and aspiring registered dietitian currently pursuing my MPH at the UC Berkeley School of Public Health, concentrating in Public Health Nutrition and Maternal, Child, and Adolescent Health. Originally from Atlanta, GA, I graduated from Cornell University with my B.S. in Human Biology, Health, and Society, and have spent the past three years in Los Angeles, CA working in the public health nutrition field as a health policy innovator, wellness and recovery coach, and clinical health researcher. I aim to enhance the nutrition care process of vulnerable populations by using a decolonial lens which centers food as enclaves for healing, considers opportunities for communal food sovereignty, and constructs racially/culturally intersectional models within treatment interventions to erase Eurocentric barriers impeding behavioral success.

Francisca Catalan
I am a 3rd-year Ph.D. student in the Department of Integrative Biology at UC Berkeley. I study the molecular evolution of the placenta using state-of-the-art bioinformatics and molecular protocols to characterize neonatal diseases that arise during placental development. Rasmus Nielsen and I are developing a course, IB 35AC - Human Variation, which will discuss the role that genetics and societal norms play on human variation and identity. My main aim is to decolonize how we understand and teach human genetics by fostering inclusive and collaborative environments in the classroom and beyond. In addition, I hope to help expand biology to the global south by breaking down language barriers and ultimately reconstructing academia.

Support

Summary
Approximately $50,000 was spent on the summer course improvement effort (approximately $5000/course) thanks to contributions from several sources. All of this funding was obtained on an ad-hoc basis; there is currently no funding pathway to support future iterations of this work. No faculty, staff, or lecturer received any compensation for their time and participation.

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Rausser College of Natural Resources

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