

CS Capacity Efforts at Google

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CS Capacity Awards

- Launched in 2014 to address rising enrollments
- Goal is to surface a wide variety of technological and pedagogical solutions to address the challenges rising in very different institutions
- We are in the third year and now sharing what has been learned from partner institutions

RUTGERS

MHC

GEORGE
MASON
UNIVERSITY

NC STATE
UNIVERSITY



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Duke
UNIVERSITY

Berkeley
UNIVERSITY OF CALIFORNIA

CRA 'Scaling Capacity' Site

<http://cra.org/crae/scaling-capacity>

A website for institutions to share best practices in the CS Capacity crunch in response to the surge in enrollment in university CS courses.



Google

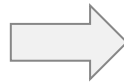


<http://cra.org/crae/scaling-capacity/>

Proprietary + Confidential

HELP WITH

- ☐ Auto-Grading (3)
- ☐ Cheating (1)
- ☐ Inclusion (4)
- ☐ Student Preparedness (6)
- ☐ TAs & Tutors (6)
- ☐ Teaching Styles (1)



MaGE Training Course

The MaGE Training Course prepares students for educating, mentoring, and supporting others in inclusive ways. The course raises awareness of the role of social identity in learning, emphasizes active learning within computer science, and prepares students to be technical peer mentors.



Help With: Student Preparedness, TAs & Tutors | **Ideas For:** Inclusion, Mentoring, Tutoring

Class Sizes: 1-50, 101-250

Years: Freshmen, Sophomores, Juniors, Seniors+ | **Majors:** All Majors

IDEAS FOR

- ☐ Class Management (3)
- ☐ Data Analysis (1)
- ☐ Inclusion (6)
- ☐ Mentoring (5)
- ☐ Tutoring (4)

Providing Better Feedback in Auto-Grading

The goal is to provide better feedback to our students in auto-grading situations. The intervention comprises an added map between assignments and concepts. The mapping tool enables educators to point out which concepts students have failed to demonstrate in a code submissions and provide students with feedback on the concept or concepts they have failed to understand.



Help With: Auto-Grading, Inclusion, Student Preparedness, TAs & Tutors | **Ideas For:** Class Management, Inclusion, Mentoring, Tutoring

Class Sizes: 1-50, 51-100, 101-250, 251-500, 501-1000, 1000+

More information:
Faculty Research Awards:
<http://bit.ly/2fKJaXi>

Guide to Technical Development:
<https://techdevguide.withgoogle.com/>

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