



CSP4Hawaii

A RESEARCHER-PRACTITIONER PARTNERSHIP (RPP) PROJECT, SPONSORED BY THE NATIONAL SCIENCE FOUNDATION, TO SUPPORT THE DEPLOYMENT OF AP COMPUTER SCIENCE PRINCIPLES WITHIN SECONDARY SCHOOLS IN HAWAII

NSF AWARDS \$1M TO UH

THE UNIVERSITY OF HAWAII HAS BEEN AWARDED A GRANT FROM THE NATIONAL SCIENCE FOUNDATION (NSF) STEM + COMPUTING (STEM+C) PROGRAM

- 60+ TEACHERS ACROSS 30+ SCHOOLS
- 3-YEAR STUDY STARTING OCTOBER 2017
- RESEARCHER-PRACTITIONER PARTNERSHIP
- AP CSP CURRICULUM FROM UTEACH
- NETWORKED IMPROVEMENT COMMUNITIES
- DETAILS AT MAUI.HAWAII.EDU/CSP4HI

COMPUTER SCIENCE FOR ALL

RESEARCHER-PRACTITIONER PARTNERSHIP (RPP)

RPPs aim to strengthen the capacity of an organization to reliably produce valued CS and CT education outcomes for diverse groups of students, educated by different teachers from varied organizational contexts. The focus is on succeeding when implemented at scale. These studies have less prescriptive research designs and methods, with research occurring in rapid, iterative, and context-expanding cycles. They require deep engagement of researchers and practitioners during the collaborative research on problems of practice that are co-defined and of value to researchers and education agencies, for example, a school district or community of schools.

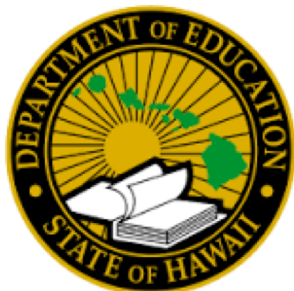
[Source: collaboratory.mspnet.org]

OVERVIEW

The University of Hawaii (UH), in collaboration with the Hawaii Department of Education (HIDoE), will conduct a 3-year study - Computer Science Principles (CSP) for All in Hawaii (CSP4Hawaii) - aimed at improving state-level initiatives to address diversity in computer science education. The project, structured as research-practitioner partnership (RPP), will replicate and study curriculum and teacher professional development for a CSP course, based on previous work by UTeach. It will identify and remediate barriers to participation of underrepresented groups.

The project will collaborate with the University of Texas and their UTeach Professional Development (PD) program to utilize its curated CSP curriculum, best practices, and resources. It will expand teacher knowledge of, and practices with, computer science principles, creating a more diverse pool of classroom teachers who can comfortably integrate CSP coursework into their classrooms to broaden participation.

It will use UH faculty, HIDoE high school teachers, UTeach support technicians and industry/business mentors to provide high school teachers with the skills and strategies to improve recruitment and engagement of underrepresented students in CSP and computational problem solving; and it will create Networked Improvement communities (NIC) throughout the State of Hawaii to gather and use meaningful student and teacher demographic information to monitor strategic decision-making for achieving equity of opportunity for computer science learning.



Project Investigators
(NSF Award #1738824):
Dr. Debasis Bhattacharya
debasib@hawaii.edu
(Principal Investigator)
Gerald Lau (Co-PI)
Steven Auerbach (Co-PI)
Dr. Debra Nakama (Co-PI)
Jodi Ito (Co-PI)

