Departmental BPC Plan
Computer Science Department
Brigham Young University

Effective dates of Plan: 11/18/2022- 11/18/2024

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1. Context

Brigham Young University (BYU) is a private PhD-granting university sponsored by the Church of Jesus Christ of Latter-Day Saints with an undergraduate population of 34,000. The BYU Computer Science department's efforts to broaden participation in computing are grounded in our university's statement on belonging, which states that "we are united by our common primary identity as children of God." Within our department, we have 1,500 undergraduate students, 110 graduate students, and 34 faculty.

	BYU enrollment	BYU CS graduates	Utah CS graduates
Men	49%	89%	88%
Women*	51%	11%	12%
Caucasian	81%	84%	77%
Hispanic*	7%	6%	6%
Asian/ Pacific Islander*	3%	2%	6%
American Indian*	<1%	0%	<1%
Black*	<1%	0%	1%
Two or more races	4%	3%	3%
Other	4%		
International		3%	5%
Unknown		1%	2%

The table shows recent distribution of students from historically underrepresented groups (HUGs, marked with *) at BYU along with the distribution of graduates in CS specifically. The distribution of CS graduates in the state of Utah is shown for additional context. We see an opportunity to increase the number of female students at BYU who graduate with a computing degree and to increase the number of students from other HUGs that enroll at BYU, complete a CS degree and feel a sense of belonging while completing our program. The department has a Computer Science Inclusion Diversity and Equity (CSIDE) team consisting of staff, faculty, and students that identifies and implements practices to better understand and meet the needs of students from HUGs.

A key goal in our plan is to create a process for generating a report each year that summarizes the department climate for students from HUGs. Generating and reviewing this report enables us to track progress and focus other goals where needed.

2. Goals, Activities, and Measurement

G1: Climate of Belonging. By Fall 2024 create a process for generating a report each year summarizing the departmental climate for students from HUGs with an emphasis on belonging and present it in a faculty meeting.

G2: Retention. By Fall 2024, measure and improve retention of students from HUGs.

G3: Recruiting. By Fall 2024, implement processes for recruiting new students from HUGs.

Activities
1. [G2] Faculty implement research-based inclusive pedagogical practices from NCWIT, AccessComputing, or EngageCSEdu.org.
2. [G2] Create laboratory sections, run by Teaching Assistants, where students complete assignments in teams, giving each student equitable access to support networks.
3. [G2] Create a sample statement on belonging, which encompasses diversity, inclusion, and equity, that can be used in class syllabi.
4. [G1] A committee of faculty and staff will determine which survey on departmental climate to use and coordinate student participation in that survey.
5. [G1] Faculty complete 2 or more modules from the National Center for Women in Technology (NCWIT) 101 course online.
6. [G1,G3] Faculty will visit with existing affinity groups at BYU including Black Student Union, Women in Computer Science, Latinos in Action, Latino Club, Pacific Islanders Club to support their activities and recruit majors and graduate students.
7. [G2,G3] Faculty will arrange a lab tour of their research lab for students from HUGs. CSIDE will invite students to attend.
8. [G2,G3] Faculty will organize a colloquium or seminar speaker from a HUG each year so that speakers from HUGs speak at least every other month.
9. [G2] Faculty and TAs will engage in training on BPC using department or university resources.
10. [G3] Faculty and current students will contact local high school students from HUGs with experience in CS to recruit them to major in CS. This includes students who have been recognized by state and national organizations for their participation in programming and other CS related competitions.
11. [G2,G3] Faculty host a weekend research workshop for undergraduates from HUGs to encourage their interest in pursuing a PhD.
12. [G3] Faculty will explore creating an Academic Career Mentoring program designed to encourage students from HUGs to consider careers in academic CS.
13. [G2] The department will send students to BPC-focused conferences such as Grace Hopper, Tapia, CRA-WP Faculty will prepare and send students from HUGs to top research conferences in their area.
14. [G1] Faculty attend or support events sponsored by BYU CSIDE to learn about and support BPC efforts.
15. [G1,G2,G3] Track and encourage engagement in the other activities in this plan.