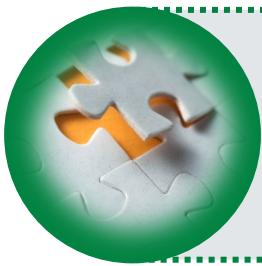# Cultural Border Crossing: A Framework for Supporting Black and African American Students in Computer Science (CS)

Researchers suggest that student success in CS is greatly impacted by their ability to transition between their "home" culture and the culture of school and scientific disciplines (Aikenhead, 2001; Ferguson, 2016).

Students who face large differences across home, school, and science cultures can experience academic and socio-emotional challenges (e.g., imposter syndrome) during their studies in CS.

Cultural brokers are individuals who help students make connections between their home culture and the cultures of their schools and CS.

Cultural brokers may be teachers, mentors, family members, peers, or other trusted members of students' social networks who have knowledge of each of these cultures and the skills to help students more easily navigate between them.

Tips on Navigating Cultural Borders between Home, CS, and School

We conducted interviews with faculty who serve as mentors and students in CS. Respondents highlighted the following strategies for successfully bridging differences in home, science, and school cultures:

1 Seek community in the CS field.

- Students with friends, family, or mentors in the CS field reported feeling that they have a "safe space" for sharing challenges and successes and getting connected to resources.

- Students facing cultural differences may need to exert more effort to build such community.

2 Build on existing relationships.

- Our respondents said they built on existing relationships to call in acquaintances, such as a helpful teacher, to be a formal mentor.

- Mentorship was most impactful when mentors shared some aspect of the student's background (e.g., race, gender, nationality).

3 Join a professional network.

- Professional networks serve as vital channels for students to meet mentors, build community, and get connected to resources.

- Students cited networks such as:
  - IAAMCS
  - NSBE
  - blackcomputeHER
  - CRA-WP
  - STEM Advantage