

OPENING STATEMENT
Ranking Member Eddie Bernice Johnson (D-TX)

House Committee on Science, Space, and Technology
Subcommittee on Research and Technology
“STEM and Computer Science Education: Preparing the 21st Century Workforce,”
July 26, 2017

Thank you, Chairwoman Comstock, for holding this hearing on STEM and Computer Science Education.

I was thrilled when President Obama announced his Computer Science for All initiative last year. The Computer Science for All initiative not only called attention to the need to improve computer science education, but also to the need to ensure that all students – including women and underrepresented minorities – are encouraged to participate. Since President Obama’s announcement, we have seen a flurry of activity, and progress has been made, but we are not there yet.

In high school, female students are taking the Computer Science Advanced Placement exam at rates far lower than any other AP exam. In 2016, female students accounted for just 23 percent of AP exam takers in computer science. Underrepresented minorities accounted for 15 percent of exam takers.

The number of bachelor’s degrees in computer science has exploded over the last several years. However, when you break this growth down by gender, it is apparent that it is almost entirely due to an increase in male graduates. Only 18 percent of bachelor’s degrees in computer science are awarded to women. The same fraction of women were earning bachelor’s degrees in computer science in the 1970’s.

Structural and social barriers are preventing us from fully engaging students of both genders, students of all ethnicities, and students from all backgrounds as we attempt to increase participation in computer science. Right now, computer scientists are creating innovative products and services that will affect all of our lives. These innovations cannot meet the needs of society if they are developed without insights from women and underrepresented minorities.

One encouraging advancement has been the implementation of a new AP Computer Science course, called Computer Science Principles. The National Science Foundation supported the development of this course, and it is designed with the goal of engaging more women and underrepresented minorities in computer science.

With the introduction of this new exam in 2017, participation in AP Computer Science exams increased by 4 percent for women and 5 percent for underrepresented minorities. This is a great step forward, but more can and must be done to engage women and underrepresented minorities at all levels of education. I look forward to discussing ways to foster a welcoming learning environment for all students to gain skills in computer science. This is essential if we are to ensure that the Computer Science for All initiative, launched by President Obama, lives up to its name.

Before I close, I would like to make note of the efforts made by a valuable member of the Committee, Representative Jackie Rosen. Last week, she introduced the “Code Like a Girl Act” which seeks to engage more girls in computer science at early levels of education. I thank her for her efforts and I hope to see her bill receive speedy consideration.

I thank the witnesses for being here today, and I look forward to the testimony and discussion. I yield back.