



Research News

Low-cost intervention boosts undergraduate interest in computer science

Research looks at variables related to participation in computer science



Researchers investigate whether 'growth mindset' intervention affects interest in computer science.

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New research funded by the National Science Foundation finds that online intervention taking less than 30 minutes significantly increases interest in computer science for both male and female undergraduate students.

"Our focus was on determining how and whether a 'growth mindset' intervention would affect student interest and performance in computer science," says Jeni Burnette, first author of a paper on the work and an associate professor of psychology at [North Carolina State University \(/cgi-bin/good-bye?https://news.ncsu.edu/2019/05/intervention-boosts-comp-sci-interest/\)](http://news.ncsu.edu/2019/05/intervention-boosts-comp-sci-interest/), which conducted the study.

"We knew from previous work in other contexts that a growth mindset -- the belief that human attributes are malleable -- can have significant consequences for self-regulation and goal achievement," Burnette says.

"This research is important because there are large projected shortages of science, technology, engineering and mathematics professionals to meet the demands of the American economy for the next decades," says Marc Sebrechts, a division director in NSF's Social, Behavioral, and Economic Sciences Directorate, which funded the project.

According to data from the National Center for Science and Engineering Statistics within NSF, women received fewer than 20% of the undergraduate degrees in computer science in 2016. "Projects like this that tease apart the variables related to participation are important to NSF's mission to advance science," Sebrechts says.

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