

[About](#)[Subscribe](#)**SHOW ME MIZZOU**[Topics ▾](#)[Schools & Colleges ▾](#)[Events](#)[MIZZOU Magazine ▾](#)[For the Media](#)[News Release](#) | [Research](#)

## STEM Career Days boost high school students' career aspirations in STEM fields, MU study finds

Study shows high school students who attended STEM Career Days were far more likely to pursue STEM-related careers than those who did not participate.



Nov. 1, 2023

Contact: Brian Consiglio, 573-882-9144, [consigliob@missouri.edu](mailto:consigliob@missouri.edu)

A new study at the University of Missouri — in partnership with Harvard-Smithsonian researchers — shows that when colleges host 'STEM Career Days,' the students who attend are far more likely to pursue a career in a STEM (Science, Technology, Engineering and Math) related field.

The findings not only highlight the benefits of college recruiters introducing high school students to STEM-related opportunities, but they can also help increase and diversify the STEM workforce in the United States.

Michael Williams, an assistant professor in the MU College of Education and Human Development, analyzed a nation-wide survey conducted by Harvard

University that asked nearly 16,000 college students if they attended a college-run STEM Career Day while in high school. He found that the students who attended were far more likely to have STEM-related career aspirations compared to the students who did not attend.

"Now that we have found that this type of intervention works for turning that potential interest in STEM into career aspirations in STEM, we can work on designing these interventions in a way to be even more effective and accessible to develop a more diverse STEM workforce," said Williams, who is also a faculty fellow in the MU Division of Inclusion, Diversity & Equity. "If you want someone to be good at something, you want them to develop a sense of efficacy, which is about putting them in a position where they can see themselves doing it and succeeding at it, and seeing other people that look like them doing it as well."

When Williams was pursuing a master's degree in computer information technology, he remembers being the only Black student in classes such as computer engineering and differential equations. He also remembers the classes being disproportionately made up of international students.

"The United States trails a lot of global competitors in the production of STEM talent, especially in areas like sophisticated technology and quantitative methodologies," Williams said. "The National Science Foundation has pushed for broadening participation in STEM fields and increasing diversity for populations that have previously been excluded from STEM-related opportunities. So, I am passionate about reaching people earlier in the educational pipeline and seeing what interventions help turn interest into career aspiration."

Williams added that MU is a land-grant university and has several community outreach initiatives to not only expose Missouri students to STEM topics at the high school level, but also at the middle and elementary school levels.

"STEM Cubs is a free STEM education program for students in kindergarten through eighth grade that is hosted by the MU Office of Academic Access and Leadership Development, MU College of Education and Human Development, and MU College of Engineering that emphasizes the importance of exposing all students to exploratory and experiential learning," Williams said. "The program seeks to engage young students, particularly those historically underrepresented in STEM education and career fields, to hands-on STEM activities. By allowing them to learn about scientific concepts and how they relate to everyday life, the program helps them build interest in science and science-based careers."

The study "[A quasi-experimental study of the impact of college-run science, technology, engineering, and mathematics \(STEM\) career days on American students' STEM career aspirations](#)," was published in *International Journal of Science Education*.



Michael Williams

#### MU College of Education and Human Development



## RELATED STORIES



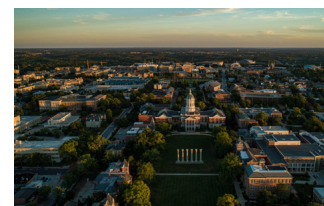
Accolades



News Release



Accolades



News Release

**Chris Prestigiacombo awarded 2024 Kemper Fellowship for Teaching Excellence**

**University of Missouri Board of Curators honors former Sen. Roy Blunt with naming of Soil Testing and Research Laboratory**

**Jason Furrer awarded 2024 Kemper Fellowship for Teaching Excellence**

**MU officials provide support, counseling in search for missing student**

Anyone with information is encouraged to contact MUPD.

A groundbreaking ceremony will take place April 5.

Subscribe to

# SHOW ME MIZZOU

Stay up-to-date with the latest news by subscribing to the Show Me Mizzou newsletter.

**SUBSCRIBE**



## Contact us

Marketing and Communications

newsandinfo@missouri.edu

329 Jesse Hall

Columbia, MO 65211

**Phone:** 573-882-8390

### RESOURCES

[Accolades](#)

[Archive](#)

[Events](#)

[Submit a Story Idea](#)

[Submit an Accolade](#)

### FIND INFO FOR

[Students](#)

[Faculty](#)

[Families](#)

[Alumni](#)

[Media](#)

MU is an equal opportunity/access/affirmative action/pro-disabled and veteran employer and does not discriminate on the basis of sex in our education programs or activities, pursuant to Title IX and 34 CFR Part 106. For more information, visit MU's Nondiscrimination Policy or the Office of Institutional Equity.