

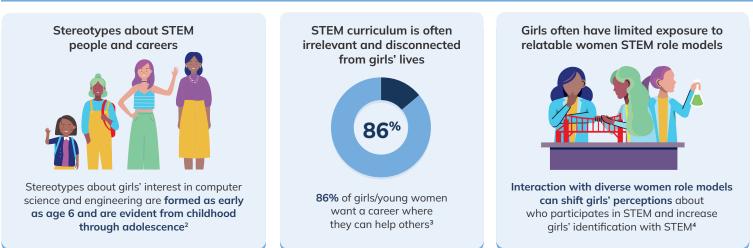
MARCH

2025

The State of Girls and Women in STEM

GIRLS AND YOUNG WOMEN DO WELL IN MATH AND SCIENCE

However, multiple barriers inhibit girls' and young women's confidence in STEM and development of a positive STEM identity. These barriers are even greater for girls of color and of low socioeconomic status.¹



WOMEN EARN 50% OF BACHELOR'S DEGREES IN SCIENCE & ENGINEERING⁵

Women earn a majority of bachelor's degrees in psychology, biological sciences, and social sciences, but they earn only





in Computer & Information Science

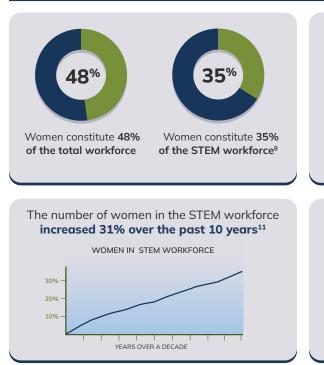


in Physics6

From 2017 to 2023, the number of Black, Latina, and Native American women graduating with computing degrees more than doubled⁷



THE STEM WORKFORCE IS BECOMING MORE DIVERSE, YET WOMEN REMAIN UNDERREPRESENTED



Women STEM professionals are concentrated in different fields than men, with relative high shares of women in social sciences (65%) and life sciences (48%) but only



The increase in women's participation in the STEM workforce includes all racial and ethnic groups, but Latina, Black, and Native American women represent less than 10% of the STEM workforce overall¹²



MARCH 2025 REFERENCES

NGCP

1. Archer, L., DeWitt, J., Osborne, J., Dillon, J., Willis, B., & Wong, B. (2012). Balancing acts: Elementary school girls' negotiations of femininity, achievement, and science. *Science Education*, 96(6), 967–989. https://doi.org/10.1002/sce.21031

Kang, H., Calabrese, Barton., A., Tan, E., Simpkins, S. D., Rhee, H., & Turner, C. (2019). How do middle school girls of color develop STEM identities? Middle school girls' participation in science and identification with STEM careers. *Science Education*, 103(2), 418–439. <u>https://doi.org/10.1002/</u> <u>sce.21492</u>

Tan, E., Calabrese Barton, A., Kang, H., & O'Neill, T. (2013). Desiring a career in STEM-related fields: How middle school girls articulate and negotiate identities-in-practice in science. *Journal of Research in Science Teaching*, *50*(10), 1143–1179. https://doi.org/10.1002/tea.21123

- 2. Master, A., Meltzoff, A. N., & Cheryan, S. (2021). Gender stereotypes about interests start early and cause gender disparities in computer science and engineering. Proceedings of the *National Academy of Sciences*, *118*(48), e2100030118. https://doi.org/10.1073/pnas.2100030118
- 3. Hinkelman, L. (2024). The Girls' Index™: Girls & STEM Impact Report by Ruling Our eXperiences. Ruling Our eXperiences, Inc. <u>https://static1.squarespace.com/</u> <u>static/62f55ec3c3784d0f3ec88011/t/6706dd173ba9602cad</u> <u>fbc819/1728503064420The+Girls%27+Index%E2%84%A2+</u> <u>Girls+%26+STEM+Impact+Report.pdf</u>
- 4. Jethwani, M. M., Memon, N., Seo, W., & Richer, A. (2017). "I Can Actually Be a Super Sleuth": Promising Practices for Engaging Adolescent Girls in Cybersecurity Education. *Journal* of Educational Computing Research, 55(1), 3–25. <u>https://doi.org/10.1177/0735633116651971</u>

O'Brien, L. T., Hitti, A., Shaffer, E., Camp, A. R. V., Henry, D., & Gilbert, P. N. (2016). Improving Girls' Sense of Fit in Science: Increasing the Impact of Role Models. *Social Psychological and Personality Science*, 8(3), 301–309. <u>https://doi.org/10.1177/1948550616671997</u>

Riedinger, K., and A. Taylor. (2016). I could see myself as a scientist: The potential of out-of-school time programs to influence girls' identities in science. *Afterschool Matters 23*, 1–7. <u>https://www.niost.org/Afterschool-Matters-Spring-2016/</u>i-could-see-myself-as-a-scientist-the-potential-of-out-of-school-time-programs-to-influence-girls-identities-in-science

- National Center for Science and Engineering Statistics. (2023). Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023 (Special Report NSF 23-315). National Science Foundation.
- 6. National Science Board. (2024). *Science and Engineering Indicators 2024: The State of U.S. Science and Engineering* (NSB-2024-3). National Science Foundation. <u>https://ncses.nsf.gov/pubs/nsb20243</u>
- 7. Reboot Representation (2024). Reboot Representation Impact Report Fiscal Year 2024. <u>https://</u> rebootrepresentation.org/wp-content/uploads/2025/01/ Reboot-Representations-Annual-Impact-Report-2024.pdf
- 8. National Center for Science and Engineering Statistics. (2023). *Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023* (Special Report NSF 23-315). National Science Foundation.
- 9. National Science Board. (2022). Science and Engineering Indicators 2022: The State of U.S. Science and Engineering (NSB-2022-1). National Science Foundation. <u>https://ncses.nsf.</u> gov/pubs/nsb20221
- National Center for Science and Engineering Statistics. (2023). Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023 (Special Report NSF 23-315). National Science Foundation.
- National Center for Science and Engineering Statistics (2023). Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023 (Special Report NSF 23-315). National Science Foundation.
- National Center for Science and Engineering Statistics. (2021). Women, Minorities, and Persons with Disabilities in Science and Engineering: 2021 (Special Report NSF 21-321). National Science Foundation. <u>https://ncses.nsf.gov/ wmpd</u>