

STEP UP: Supporting Teachers to Encourage the Pursuit of Undergraduate Physics for Women



Zahra Hazari¹, Pooneh Sabouri¹, Anne Kornahren²

1. Florida International University, Miami, FL; 2. American Physical Society, College Park, MD

References

- [1] White, S., & Tesfaye, C.L. (2011). Female students in high school physics. American Institute of Physics Report, July 2011.
- [2] HERI (2019). CIRP Freshman Survey Data 2019. Los Angeles, CA: Higher Education Research Institute.
- [3] NCES (2020). The Condition of Education 2020. Institute of Education Sciences, National Center for Educational Statistics NCES 2020-144.
- [4] Hazari, Z., Brewe, E., Goertzen, R. M., & Hodapp, T. (2017). The importance of high school physics teachers for female students' physics identity and persistence. The Physics Teacher, 55(2), 96-99.
- [5] Holland, D., Lachicotte, Jr., W., Skinner, D., & Cain, C. (1998). Identity and Agency in Cultural Worlds. Cambridge, MA: Harvard University Press.
- [6] Urrieta, Jr., L. (2007). Identity production in figured worlds. Urban Rev., 39, 117.
- [7] Lock, R. M., & Hazari, Z. (2016). Discussing underrepresentation as a means to facilitating female students' physics identity development. Physical Review PER, 12(2), 020101.
- [8] Kessels, U., Rau, M., & Hannover, B. (2006). What goes well with physics? Measuring and altering the image of science. British Journal of Educational Psychology, 76(4), 761-780.
- [9] Leslie, S. J., Cimpian, A., Meyer, M., & Freeland, E. (2015). Expectations of brilliance underliegender distributions across academic disciplines. Science, 347(6219), 262-265.
- [10] Bruun, M., Willoughby, S., & Smith, J. L. (2018). Identifying the stereotypical who, what, and why of physics and biology. Physical Review PER, 14(2), 020125.
- [11] Guerra, J. B., Barton, A. C., Tan, E., Kang, H., & Brecklin, C. (2012). Kay's Coat of Many Colors: Out-of-School Figured Worlds and Urban Girls' Engagement with Science. In Identity Construction and Science Education Research (pp. 43-60). Brill Sense.
- [12] Solorzano, D. G., & Yosso, T. J. (2001). Critical race and LatCrit theory and method: Counter-storytelling. International journal of qualitative studies in education, 14(4), 471-495.
- [13] Andrews, M. (2002). Introduction: Counter-narratives and the power to oppose. Narrative Inquiry, 12(1), 1–6.