College Readiness Workshop Resources

Publications:

Choy, S.P. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment* (NCES 2001-126). Washington, DC: U.S. Department of Education, National Center for Education Statistics. <u>https://nces.ed.gov/pubs2001/2001072_Essay.pdf</u>

Essay summarizes NCES studies of the experiences of high school graduates and postsecondary students whose parents did not attend college, showing that such students are at a distinct disadvantage when it comes to post-secondary access—a disadvantage that persists even after controlling for other important factors.

Engle, J., and Tinto, V. (2008). *Moving Beyond Access: College Success for Low-Income, First Generation Students*. Washington, DC: Pell Institute for the Study of Opportunity in Higher Education. <u>http://files.eric.ed.gov/fulltext/ED504448.pdf</u>

An analysis of the status of low-income, first-generation college students in higher education. Using data from the U.S. Department of Education, the ways in which this population participates in higher education are described, including persistence and degree attainment rates. Barriers to college degrees are discussed and recommendations are made for institutional and government actions to close the access and success gaps that exist.

Fry, R. & Taylor, P. (2013). Hispanic High School Graduates Pass Whites in Rate of College Enrollment: High School Drop Out Rate at Record Low. *PEW Research Hispanic Trends Project*. <u>http://www.pewhispanic.org/files/2013/05/PHC_college_enrollment_2013-05.pdf</u>

Report examines U.S. Bureau of Labor Statistics and concludes that despite the narrowing of some long-standing educational attainment gaps, Hispanics continue to lag whites in a number of key higher education measures. Related factors influencing this statistic are discussed.

Holdren, J. P., & Lander, E. (2012). Report to the President—Engage to excel: Producing one million additional college graduates with degrees in science, technology, engineering, and mathematics. *President's Council of Advisors on Science and Technology*. https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/fact_sheet_final.pdf

This Report to the President estimates that the United States will need to increase the number of students who receive undergraduate STEM degrees by about 34% annually over the coming years in order to maintain its historic preeminence in the fields of STEM. It recommends (i) improving the first two years of STEM education in college, (ii) providing all students with the tools to excel, and (iii) diversifying pathways to STEM degrees.

Horn, L., & Nuñez, A. M. (2000). *Mapping the road to college first-generation students' math track, planning strategies, and context of support*. DIANE Publishing. <u>nces.ed.gov/pubs2000/2000153.pdf</u>

This statistical analysis report compares the high school academic experiences of firstgeneration students with their peers from families where one or both parents have either some college education or are college graduates.

Hurtado, Sylvia, Nolan L. Cabrera, Monica H. Lin, Lucy Arellano, and Lorelle L. Espinosa. "Diversifying Science: Underrepresented Student Experiences in Structured Research Programs." *Research in Higher Education* 50.2 (2009): 189-214. Web. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3596157/</u>

Study used focus group discussions to investigate essential factors for becoming a scientist/STEM practitioner, as well as the impact of race and social stigma in scientific training.

Shaw, E.J., & Barbuti, S. (2010). Patterns of Persistence in Intended College Major With a Focus on STEM Majors. *The National Academic Advising Association Journal*, *30*(2): 19–34. <u>https://eric.ed.gov/?id=EJ906475</u>

This report examined patterns of persisting in STEM; results showed differences in persistence by academic field as well as by gender, parental income, and first-generation college student status with the largest variation by ethnicity. High school performance in math and science, taking AP exams in STEM, positive science self-efficacy beliefs, and having a goal of obtaining a doctorate were related to persistence in varied ways across STEM majors.

Whalen, D.F., & Shelley, M.C. (2010). Academic Success for STEM and Non-STEM Majors. Journal of STEM Education, 11(1,2): 45–60. http://www.jstem.org/index.php?journal=JSTEM&page=article&op=view&path%5B%5D=1470

Study sought to develop an integrated understanding of how multiple predictor variables affect student degree attainment and to determine how those variables relate to whether students are in STEM or non-STEM majors. Long-term retention/graduation was predicted significantly by cumulative grade point average, financial need, aid (work-study, loan, and gift), gender, ethnicity, years living on campus, high school rank, ACT composite, out-of-state residence, and STEM status.