

Did You Know? Special Populations

Courtesy of NAGC Research and Evaluation Network

STEM in Universities

Females less likely to earn STEM degrees than males, Asian students more likely to earn STEM degrees than other groups.

Predictors of earning a STEM degree in a Hispanic Serving Institution indicated females “were less likely than males to earn a STEM degree, while the odds of earning a STEM degree were 2.48 times larger for Asian American students when compared to White students. An increase in SAT math scores or high school percentile increased the odds of earning a degree in STEM as compared to earning a non-STEM degree” (Crisp, Nora, & Taggart, 2009, p. 936).

Elementary Science

Early science instruction reduces achievement gap in educational outcomes.

Early elementary science instruction can reduce the gap in educational outcomes between whites and blacks by enabling “children to learn high-level subject matter (such as Newtonian mechanics and thermodynamics) at much younger ages than is typical and that the approach is successful for children who vary greatly in socioeconomic background” (Raudenbush, 2009, p. 176).

Parenting vs. Gender

Parenthood is a greater predictor of differences in graduate students than gender.

Top graduate students and profoundly gifted individuals exhibit gender differences in their work preferences, life values, and personal views. However, those observed differences are much less than the differences observed within genders for both parents and nonparents (Ferriman, Lubinski, & Benbow, 2009).

Gifted Students with Autism Spectrum Disorders

Comprehensive evaluations are essential in the accurate diagnosis of high ability students with co-existing autism spectrum disorder.

Assouline, Foley Nicpon and Doobay’s (2009) case study analysis compared the psychometric characteristics of two profoundly gifted girls, one with autism spectrum disorder (ASD) and one without ASD. This comparison of the girls’ cognitive and academic abilities, behavioral and social-emotional characteristics, and executive and adaptive functioning demonstrates how data from a comprehensive evaluation can distinguish between the manifestation of extreme giftedness and concomitant social impairment indicative of ASD and extreme giftedness and co-occurring social difficulties that are not consistent with ASD.

Expectation Gaps

The expectation gap between Black and White students is much smaller than the achievement gap.

Reed (2009) found the expectations gap much smaller and less consistent than the achievement gap. “There is only a negligible eighth-grade Black-White expectations gap. The median Hispanic student faces a higher proficiency cut score than the median White student. Yet both Black and Hispanic students achieve at much lower levels than the median White student. Even where there is something of a Black-White expectations gap, it does not approach the size of the Black-White achievement gap ... ” (p. 736).



References

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