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www.stairwaytostem.org

Recruiting & Retaining a Wider Representation of Autistic STEM College Students



Key Indicators of College Transition Success

- Start Early
- Have High Expectations for Any Given Student
- Practice Self Advocacy Skills
- Get High School Job or Volunteer Experience
- Establish a Community & Sense of Belonging
- Consider Community College













Starting Early



High Expectations



Great! What Can CCs Do to Help?



- Bring students to campus
- Actively seek out & support students intimidated or unfamiliar with the applications process
- Be sure you are targeting Hispanic serving and other underrepresented minority schools, organizations, and communities.



Value of Getting Students to Campus

 "The unfamiliarity of everything is a major barrier in the transition. How the institution works, including the different branches of the organization that could support autistic students as well as including the unwritten expectations and things one learns from word of mouth (e.g., the importance of going to office hours to discuss the thesis of an argumentative paper, the importance of getting research experience if you want to go to graduate school, etc.)" could be part of outreach that brings people to campus.

Bring the Admissions Process to Talented Students



- Gifted student
- Attempted to apply to college <u>3 times</u>, struggled to navigate admissions process

"I can look back at specific moments and think, "Gee, that would have been so much easier with a little guidance!" This is especially true because I am a firstgeneration college student and lacked resources to ask about college for the average person, let alone an autistic adult trying to secure financial aid and register for courses out of a catalog as thick as a textbook. This is all before the act of actually attending classes!"



A Glimpse at College with Justin Robbins



BUILDING AN AUTISTIC COLLEGE COMMUNITY

https://www.stairwaytostem.org/student-reflection-

transitioning-from-high-school-to-college-as-an-autistic-stem-

<u>student/</u>

MORE VIDEOS



1:20 / 3:12



What Technician Educators Can Do

- Work from neurodiversity and social justice perspectives
- Take a strengths-based approach
- Implement UDL pedagogy
- Acknowledge intersectionality, or the ways that race, gender, and other factors can complicate experiences for disabled students.

Neurodiversity Model www.autisticscholar.com

"The neurodiversity paradigm directs us to consider the individual in their whole context. It invites us to consider interactions between the individual and other individuals around them, or between the individual and the physical spaces around them. It reminds us that sometimes it's appropriate to modify those contexts in order to protect the individual."



"Human variation has value. We want a variety of types of people in our society, because that variety enriches society as a whole. We also don't want to make people feel bad for being who they are. This last statement – "for being who they are" – is crucial. Some forms of human variation reflect variation in people's basic *personalities*. They're variation in the things that fundamentally make up a person, that make them who they are."

Strength-based approach

- Ex. A student is monopolizing discussion:
- "The instructor's response informs the class how to respond to the student, so the instructor should be careful to be respectful, and verbalize appreciation for the enthusiastic student's participation, while at the same time setting boundaries for the entire class. The instructor can also ask for <u>further information to be</u> <u>shared after class</u>, letting the student know that they value the student's contribution."
- <u>https://www.stairwaytostem.org/changing-perspectives-about-autism/</u>



Implement UDL Pedagogy



Intersectionality

1. The National Center for Education Statistics conducted a research study about racial demographics in STEM, and the findings were intriguing: the percent of students entering STEM was about equal (18-20 percent). However, Black and Latinx students drop out of STEM classes at a higher rate than their white peers (Smith, 2019)

2. Bias is rampant in STEM: according to the report, one of the studies gave science faculty identical resumes for a potential candidate. Researchers found that the scientists were more likely to choose a male candidate over a female candidate for a hypothetical job opening. The scientists also offered a higher salary and better mentoring opportunities to the male candidate (American Association of University Women, 2015)

3. How does autism affect women in STEM? According to a study to examine the autistic population in STEM majors, researchers found that autistic boys were 13 times more likely to major in STEM than autistic girls (Wei, Yu, Shattuck, McCracken, & Blackorby, 2012). The study suggests that STEM participation among girls with developmental disabilities is an urgent issue. With these statistics as a baseline, this finding means that autistic women of color make up a percent of a percent of the total STEM workforce.



Thank you!