

***Talking about Disability: The Educational and Work Experiences of Graduates and Undergraduates with Disabilities in Science, Mathematics and Engineering Majors***

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We present key findings from our study, *Talking about Disability* (1998), that apply to the interests of Coleman Institute participants. This study was conducted to better understand what helps or hinders persistence, career access and success among college students with disabilities who choose to study in science, technology, engineering, mathematics (STEM) fields. The ethnographic method—a combination of intensive interviews and small focus groups with 65 current and former STEM students—assumes that the best people to answer such questions are the students and working graduates themselves.

This research explored what experiences during college, and in their working, family, and social worlds beyond academe, support or discourage entry to and persistence within this group of educational and career fields. It was conducted at the University of Minnesota's Institute of Technology, a university campus that has been documented as offering one of the best systems of accommodation and support to disabled students.

The type of barrier to educational access that was most common, and most significant for persistence and progress, resided not in limited physical access to buildings, labs or other facilities, but in the negative attitudes and practices of STEM faculty. Playing a role as gatekeeper to the profession, they sought to ensure that all students surmounted the same set of hurdles, ostensibly in support of the meritocratic view predominant in college science education that only “the best and the brightest” should continue in the field. Some of the hurdles presented by faculty seemed to have little academic purpose, e.g., insistence that students are physically present at all classes, or that an exam must be taken by all students at the same time. The constraints imposed by, or due to, particular disabilities or medications often placed students with disabilities in the position of flouting faculty expectations.

In addition, faculty served as “lay diagnosticians,” and clearly developed two sets of categories of disability: “approved” and “disapproved”—which corresponded to those that were physically apparent, and those that were not. In particular, students with cognitive and other less visible disabilities served unwittingly to press the limits of norms held and enforced by STEM faculty in their classrooms. Despite having documented their disability and formally qualifying for accommodations and services within the university system, students with cognitive disabilities recounted having to explain, and even defend, their disability in order to convince faculty to provide accommodations in compliance with the Americans with Disabilities Act. Some faculty argued against providing accommodation on the basis of their belief that by not accommodating the student, he or she would be better prepared to work in the “real world.” Having to continually educate faculty on the nature and difficulties of cognitive disabilities was a constant theme in the academic experiences of these students.

This study frames disability as a “disadvantage of time,” in that time was a facet of every barrier encountered by students with disabilities of all types and exacerbated by STEM faculty's insistence on swift completion of assignments and tests.