

Reseñas Educativas

# **Resenhas Educativas**

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Jett, C. C. (2022). Black male success in higher education: How the mathematical brotherhood empowers a collegiate community to thrive. Teachers College Press.

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Christopher Jett's new book, *Black Male Success in Higher Education,* is a well-written and well-documented ethnographic and portraiture study of 16 Black male math majors during their senior year at Morehouse College—an all-male, historically Black liberal arts college. Moreover, his book has far broader implications for timely topics reaching from the STEM undergraduate pipeline in the United States to culturally responsive collegiate pedagogy. It is a worthwhile read for anyone interested in ISBN: 9780807767405

#### BLACK MALE SUCCESS IN HIGHER EDUCATION

How the Mathematical Brotherhood EMPOWERS a Collegiate Community to THRIVE



creating a thriving undergraduate program at their university or anyone especially interested in cultivating the mathematical skills of the students they teach. It is not just a book for researchers or college mathematics professors. Jett offers readers a playbook on how to foster excellence in their students during a time when many undergraduates who express interest in mathematics are being driven away from the subject due to the inability of many to teach and provide welcoming environments to learn and grow.

In 2020, the National Science Foundation (NSF) opened a new center focusing exclusively on the study of successful educational and pedagogical STEM practices at historically Black colleges and universities (HBCUs; National Science Foundation [NSF], 2020). The need was apparent. Although only 8.5% of America's Black undergraduates attend HBCUs, 18% of Black undergraduate STEM degrees are conferred by HBCUs (NSF, 2020). Over the course of 5 years (from 2012 to 2017), the Massachusetts Institute of Technology (MIT), one of the most highly regarded institutions

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for science, technology, engineering, and mathematics, awarded just 12 physics degrees to Black students, which was more than any other historically White institution (HWI) in the United States over the same period (Mervis, 2022). By comparison, Morehouse averages 16 such degrees per year, Delaware State University averages seven, and Dillard averages five; all of which are HBCUs (American Physical Society, 2021).

The dismal state of affairs for the STEM undergraduate pipeline at HWIs is especially acute for young Black men seeking mathematics degrees. In the 2017-2018 academic year, 970 of the 1,221 4-year Title IV institutions (roughly 80%) did not have a single math degree conferred to a Black male student (U.S. Department of Education, 2019). That same year, Morehouse conferred 15 (Jett, 2022). Despite what U.S. News and World Reports would suggest, HBCUs are at the forefront of recruiting, retaining, and fostering excellence in STEM graduates. Christopher Jett beautifully describes how it is done at Morehouse.

In the tradition of Clarence F. Stephens's Potsdam Model and Uri Tresimann's work at UC Berkeley and the University of Texas, the mathematics brotherhood at Morehouse represents a pedagogical and structural model that answers some important questions. Mainly, how do we create spaces in our undergraduate programs where students can cultivate their mathematical brilliance? Or, more concretely, how do we retain and develop the brilliant students who express interest in mathematics from the onset of entering our institutions to the moment they graduate and beyond?

Mitchell J. Chang et al.'s (2014) research into the persistence of underrepresented racial minority (URM) undergraduates in STEM fields indicates that to increase persistence and ultimately retention, URM undergraduates should be encouraged to engage in the following academic activities: studying frequently with their peers, engaging in undergraduate research, and being involved in academic clubs and organizations. Jett not only captures how these activities are done at Morehouse but suggests that these are just a few of many interventions that can be implemented to support our next generation of mathematicians.

Jett's portrayal of one such space – the Math Lab – is especially important when understanding how mathematics brilliance is elevated among the undergraduates enrolled in Morehouse's math department. On the third floor of Dansby Hall located within the Morehouse College campus is the Math Lab. In this space, Morehouse mathematics majors congregate to study together, tutor, and bond. The walls of the Math Lab are decorated with journal articles and published papers, primarily written by Morehouse faculty and former students. The third floor houses the offices of mathematics faculty, provides spaces for one-on-one and group tutoring, and open space for collaborations and discussions concerning problem sets. The Math Lab not only provides spaces for students to study together frequently, it is a place that promotes self-efficacy and sends a clear message about the many Black male contributions in the field of mathematics. As one member of the mathematical brotherhood describes it, "It's like my home away from home" (p. 87). It makes one wonder whether such collaboration needs to be encouraged or if it occurs organically in such an asset-oriented environment.

In addition to providing a distinctive academic space for mathematics, Jett notes that Morehouse faculty advocate undergraduate student research engagement through the Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP) summer institute and internships. They encourage participants to present their research at the Morehouse's Harriet J. Walton Symposium. The 16 undergraduate students in Jett's ethnography made research contributions in matrix theory, field theory and polynomials, complex variables, and integral equations, among other topics. In addition to helping students build their research résumés and add to the academic literature, they enhance their collaboration skills while engaging in the research process. Moreover, undergraduates are encouraged to participate in a student-led Math Club and join the Putnam Team, which competes in the William Lowell Putnam Mathematical Competition.

These are just a tiny fraction of the institutional opportunities provided at Morehouse. Jett also discusses how Morehouse mathematics faculty host an annual Awards Day ceremony, recognizing the outstanding academic performance of students that stand out in each course. Students who receive such awards are given the coveted Morehouse Mathematics sweater vest, which Jett likens to the paraphernalia of fraternal organizations in the Black fraternal tradition. Students are also expected to engage in service learning and community-based outreach in local K-12 schools, providing tutoring and mentoring for younger students in the surrounding areas. A host of opportunities, including professional conferences, Morehouse Homecoming, and alumni events, give undergraduates the opportunity to meet and network with older generations of the Morehouse mathematical brotherhood. As Jett describes, the faculty in the mathematics department at Morehouse are not just concerned with the grades of their students in their current classes but the overall development of Morehouse men and their future success.

Using both Black masculinity and critical race theory, Jett positions the culture and structure of the mathematics department of Morehouse as a model of an asset-oriented environment that seeks to deconstruct how mathematics has been historically constructed. It would be a mistake to believe that pedagogy alone is responsible for Morehouse's ability to create such an environment. Jett acknowledges that most of the professors within Morehouse's mathematics department are regarded as excellent teachers, even referring to some as *superheroes* and *geniuses* who work to foster excellence in their students. He also makes mention of the negative experiences students have had with professors he refers to as *identity thieves*, "professors who diminish Black students' racial and mathematical identities" (p. 76). While such professors exist, they do not hinder the persistence of the mathematical brotherhood. Such negative experiences with one or two educators cannot overpower the racially affirming atmosphere that amplifies

the voices and perspectives of their undergraduate students. The structure of the Morehouse mathematics department, alongside great examples of culturally responsive collegiate pedagogy, positions their students within a larger legacy of Black male excellence in the field of mathematics and the multigenerational legacy of the successful Black men who attended Morehouse in the past. As such, Jett provides recommendations for a broad audience, including professors, families, K-12 teachers, policymakers, and future researchers.

Ideally, ethnographies have broader implications outside the scope of a specific context confined by time and space. Jett's Black Male Success in Higher Education provides a lens into a model that should be adopted, adapted, and studied. While the success is commonplace at Morehouse, Jett emphasizes how such success was intentionally cultivated and crafted by those who cared enough to make it a reality. According to the National Center for Education Statistics (2017), "Mathematics majors changed majors at a rate higher than that of students in all other fields, both STEM and non-STEM" (para. 9). Retaining the next generation who expresses interest and demonstrates talent in mathematics is not an isolated issue but a national problem. One would be remiss not to examine Jett's depiction of how the interest in mathematics and the talent among the 16 undergraduate Black male math majors developed within the asset-oriented environment at Morehouse and ultimately provided an avenue for them to thrive and receive a degree. Within the cohort of students who initially declared mathematics as their major, all 16 graduated with a degree in mathematics within four years.

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