



HB 1657: Virginia STEM Education Advisory Board: purpose and duties: historically underrepresented students.

Patron: Delegate Price

Committee Referral: K-12 Subcommittee

*Position: **Strong Support***

Summary:

HB 1657 expands the purpose of the STEM Education Advisory Board to include identifying strategies to promote the participation of historically underrepresented students in STEM, defined as racial and ethnic minorities, individuals who identify as LGBTQIA+, women, and individuals who are disabled. Such strategies include:

1. Identifying barriers to STEM participation for historically underrepresented students in elementary and secondary schools;
2. Developing recommendations for elective courses in secondary schools that expand hands-on STEM opportunities for all secondary school students;
3. Developing recommendations for elective courses in secondary schools that expand and promote hands-on STEM opportunities and STEM participation for historically underrepresented students;
4. Recommending changes to the Standards of Learning that promote the STEM-related contributions of historically underrepresented groups
5. Collaborating with institutions of higher education and the private sector in the Commonwealth to educate students on and expand STEM pathways and opportunities in higher education, STEM careers, STEM internships, STEM fellowships, and other STEM enrichment programs

The bill also expands the number of non-legislative citizen members from 16 to 24, allocating one appointment to the chairs of the Virginia African American Advisory Board, Virginia-Asian Advisory Board, Latino Advisory Board, Council on Women, Virginia LGBTQ+ Advisory Board, Virginia Indian Advisory Board on State Recognition, Office of New Americans Advisory Board, and Virginia Board for People with Disabilities, subject to the approval of the majority of the members of their advisory board.

Problem:

Several communities, including racial minorities, women, LGBTQIA+ students, and the disabled community, are underrepresented in STEM. According to the [National Center for Education Statistics](#), just 37 percent of STEM bachelor degrees are awarded to women, compared to 63 percent of men earning STEM bachelor degrees. Similarly, Pew Research indicates that Black and Latino individuals compose just 7 percent and 12 percent of bachelor degree holders in STEM fields, respectively. The problem is compounded among women of color: only [5.3%, 4.3%, 2.3%, and 0.1% of STEM degree holders are Asian women, Latinas, Black women, or Indigenous women](#), respectively.

Disabled and Queer students are also underrepresented in STEM. Though disabled students compose [12 percent of the student population in middle and high school](#), they make up just [1 percent of Advanced Placement students](#) and earn significantly fewer credits in math and science compared to English. Meanwhile, Queer male undergraduate students at 78 universities are [more likely to leave their STEM majors](#) for a non-STEM major compared to their non-Queer peers, even when controlling for other factors, such as GPA.

For more information, please contact policy@prideliberation.org. The Pride Liberation Project is a student-led LGBTQIA+ rights advocacy group based in Virginia.



Underrepresentation in STEM has drastic consequences for our Commonwealth. According to [a study](#) published in the Proceedings of the National Academy of Sciences, a diverse team is more likely to perform better than a homogeneous team, as a more diverse group will be able to interpret problems in different ways, leading to innovative solutions. Moreover, underrepresentation in STEM contributes to high rates of discrimination and harassment in STEM fields: [43 percent of women](#) report misogynistic experiences at work, while [32.9 percent](#) and [24 percent](#) of Queer and people of color in STEM fields reported experiencing discrimination, respectively. This discrimination and harassment makes it [increasingly difficult](#) to retain and train talented STEM professionals from underrepresented backgrounds, as a sense of acceptance and community leads to longer retention in STEM.