

Strengthen the case for DEI

Three years ago, addressing racial justice in the United States moved firmly into the mainstream. Following the murder of George Floyd, the ongoing struggle for social justice was again laid bare, and pledges to improve diversity, equity, and inclusion (DEI) began sprouting everywhere. Now, the pendulum is swinging back on these commitments. A backlash against DEI initiatives is rising across all sectors, especially at the state level. Last year's decision by the US Supreme Court to strike down the consideration of students' racial status in college admissions has emboldened many who oppose any advancement of DEI. Although there has been specific attention to higher education, other sectors have also been attacked. The retreat includes recent anti-DEI legislation that would affect structures, programs, practices, and curricula that aim to support success for all, including persons who have been historically excluded from or marginalized within science, technology, engineering, mathematics, and medicine (STEMM). Before this backlash worsens, DEI advocates, the scientific community, universities, and federal agencies need to collectively call out the dangers of setting aside DEI and come up with robust ways to demonstrate its value to society.

DEI in STEMM is an element of its excellence. It encompasses issues beyond race and ethnicity, including those of gender, disability, and other aspects of identity that have historically been used to constrict opportunities. STEMM should ideally benefit all of society. However, this will not happen until the country creates a STEMM community as diverse as the population it should serve. Perspectives and experiences matter in what one creates. Limiting opportunity to participate in scientific and technological innovation means that science fails to meet many of society's needs. For example, one study reports that women researchers in the United States are more likely to make innovations that benefit women as a whole but are less likely to participate in commercial patenting. Their relative absence is a loss for women and for the world economy. Critics imply that DEI promotes mediocrity, whereas research shows the exact opposite.

Turning a blind eye to these benefits, at least 38 states in the US have recently introduced new anti-DEI leg-

islation (11 are now law, another two await governors' expected endorsement). The measures include prohibiting public colleges from having DEI offices and staff, banning mandatory DEI training, and forbidding the use of diversity statements. Anti-DEI proponents misleadingly claim that these practices break antidiscrimination laws and misuse public funds. However, teaching the facts of our history and evidence of inequality is central to academic freedom and every institution's mission. Evidence and truth become casualties.

These movements at the state level presage a threat to federal DEI programs. STEMM college programs in both public and private institutions receive funding from specific federal agencies, including the National Science Foundation, National Institutes of Health, and NASA, to broaden participation, address health disparities, and expand interest in STEMM. Some of these programs have been in place since the Civil Rights era. So far, their missions remain intact, but it is not clear for how long before academia and federal agencies follow the states and corporate America's lead in backing away from DEI.

To push back against the critics, it is important to remember why DEI efforts are so important and agree on the best ways to gauge their success. The success of STEMM is measured not only by publications and head counts of underrepresented groups in STEMM fields but also by creating a culture of inclusion and respect. It's crucial not to lose sight of the kind of scientific community the federal government aims to support. In this vein, DEI advocates, the scientific community, universities, and federal agencies must together consider where processes can be modified within institutions to remove barriers to participation by all. Importantly, measurements on many fronts—from innovation output to impact in the classroom—must be made to monitor progress toward this goal. For example, if improving teaching, adding relevant context, and supporting a sense of belonging within introductory courses increase retention of diverse STEMM students, then these should be carefully tracked. Such efforts will provide the data needed to answer critics and strengthen the case for DEI. We must all move from valuing what we measure to measuring what we value.

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