A new report released this week calls for an expanded view of the term "STEM workforce." Consequently, it highlights the need for more STEM education and training in the K-12 sphere and beyond.

The study by the National Science Foundation's National Science Board says this training is important even for students who aren't considering traditional STEM (science, technology, engineering, and math) because those skills are transferable to other areas, including sales, marketing, and management. Simply put, STEM skills will make anyone more marketable for high-paying, high-demand jobs, even in fields like marketing, sales or management, according to the report.

"We must ensure that all individuals have access to high-quality education," notes the report. "A well-rounded precollege education that includes significant engagement with STEM unlocks pathways into the technical STEM workforce and pursuit of additional STEM studies at the bachelor's, master's and doctoral level."

The report did not give details about exactly what should change in K-12 classrooms. It did, however, highlight the continued need, which Education Week has reported on, to remove barriers for groups of students that are traditionally underrepresented in STEM fields, including women, minorities, and low-income students.

The report also attempts to clarify the term "STEM workforce." The study actually was born out of frustrations at the NSB about the debate on whether there are too many STEM workers or too few. There is no consensus on the definition of "STEM workforce" so the
answer varied depending on what data was being used.

This report doesn't answer that glut-or-shortage question, but it does shed more light on how broad the term actually is.

The National Science Board, drawing on data from its own "Science and Engineering Indicators" report, which Education Week has also reported on, said about three times more workers could be included in science and engineering categories alone. But the point of the report isn't necessarily to redefine the term "STEM workforce," said Dan Arvizu, the chairman of the National Science Board. The point is to inform discussion on how to best prepare that workforce." It's more important to say 'how do we create a STEM-capable workforce, where STEM-type training is more broadly applicable to more categories?' he said.

http://www.nsf.gov/nsb/

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