



Guest opinion: U.S. business depends on solid STEM education

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With the arrival of the new school year, parents, students, educators and the community gear up with much anticipation. Traditional educational approaches have delivered good benefits in the past, but how can we move from good to great? How can we move our students from simply being “good enough” to make it to the next step, to a level of excellence that allows them to fully compete in a global economy?

It is with that challenge in mind that companies like ExxonMobil and organizations like the Billings Chamber have invested in and supported STEM (Science, Technology, Engineering and Math) initiatives for Billings and Lockwood.

Project Lead the Way

Over the summer, various companies stepped up to support Project Lead the Way, a STEM curriculum that will be rolled out in five Billings elementary schools this fall. It will put our students on the path to doing great things.

For our community, state and nation, STEM education is foundational for developing a globally competitive 21st century workforce. STEM education integrates the content and skills of science, technology, engineering and mathematics into the teaching and learning process and equips our current students and future scientists, engineers and entrepreneurs, with the knowledge and skills to create new, visionary technologies and the confidence to take on new frontiers.

Not only is it beneficial for our students, it aligns with Montana Common Core Standards, a critical element in enhancing the talent pipeline necessary for our communities to thrive. These standards set out expectations for school districts — large and small — as they put their students on the path to excellence. The standards are rigorous, setting a high bar for students and their teachers. And that’s for good reason, because much is at stake.

A recent Northeastern University survey of business CEOs showed that 73 percent say there is a skills gap among today’s U.S. workforce, and 87 percent contend that most college graduates lack the skills critical for success. Companies large and small – including those in the thriving oil and gas industry – are in need of highly skilled professional and trades workers to keep the economy running and lay the ground work for future innovation and progress that makes America great.

We can’t afford to wait for colleges and career-training programs to do it all. Wouldn’t we reap more benefits by investing earlier in our students’ educational careers?

That’s why businesses like ExxonMobil and entities like the Billings Chamber support efforts to encourage more analytical and critical reasoning skills to the texts students are reading and the math problems they are solving. These are the capabilities we need to prepare today’s students for the high-skilled jobs of tomorrow.

Rigorous standards

The new rigorous standards will help address an alarming trend of underperformance of U.S. students, relative to their international counterparts. An Organization for Economic Cooperation and Development assessment shows that U.S. students now rank 31st in math, 24th in science, and 21st in reading among developed countries. Any American-based company should rally behind strategies to change those rankings.

From a business perspective, Common Core standards make a lot of sense, as they provide a reliable and measurable set of outcomes. For parents, the standards provide a peace of mind that our children are getting the tools and skills necessary to succeed, no matter where their educational and career paths take them. Our teachers, who are on the front lines of education, support the new direction that provides standards for excellence, while allowing flexibility in how teachers teach. According to a 2013 survey of 20,000 teachers done by Scholastic, 73 percent said they are excited by the changes Common Core will bring to their classrooms.

All of this amounts to a big step forward in teaching and learning math and science.

STEM education is only one tool that will help America address higher educational expectations in a global economy. America needs to keep moving forward with multiple strategies that encourage entrepreneurship, innovation and discovery. These challenges will require work and collaboration from parents, teachers, school systems and business, but it is necessary work. Following the status quo and hoping for a better outcome will change nothing.

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