

**Committee on Science, Space, and Technology
Subcommittee on Research**

**March 13, 2013 Hearing
“STEM Education: Industry and Philanthropic Initiatives”**

**Opening Statement by
Ranking Member Daniel Lipinski**

Thank you, Chairman Bucshon, and thank you to all of the witnesses for being here today.

One of the reasons I joined this Committee is because of my strong interest in working to improve STEM education. I have also served as co-chair of the House STEM Education Caucus for the past four years, so I'm glad we're having this hearing and that we are doing it early in the new Congress. As a former engineer, I can personally vouch for the importance of educating our students at all levels in STEM fields.

We're all familiar with the statistics by now. According to the 2011 TIMSS study, U.S. students in 4th grade rank behind students in 10 other countries in science aptitude and 15 other countries in math, and students fall further behind as they proceed to high school. This has serious consequences for individuals and for our nation's economy. For example, while we still face unacceptably high unemployment, many employers are unable to find qualified workers. I have heard from many manufacturers that they are having a difficult time finding workers who have basic STEM knowledge. And students who aren't learning the necessary skills by the time they graduate high school are much less likely to pursue STEM fields if they go to college, constraining our workforce even further. And with fewer Americans in STEM fields, especially fewer PhDs, American innovation is suffering, further hurting economic development.

We know that improving STEM education is a complex problem with no easy or one-size-fits-all solution. Therefore, we all must work together – the private sector, nonprofits, colleges and universities, school districts, and local, state, and federal governments – to find solutions that fit specific needs. If the U.S. wants to remain the global leader in innovation and technology, we have to tackle these challenges with an “all hands on deck” approach.

Today's hearing focuses on corporate and nonprofit organization STEM initiatives. U.S. companies are realizing more and more how critical it is to their long-term success that we have a robust high-tech workforce. Meanwhile, foundations and other nonprofits are increasingly leveraging their resources and expertise in this area as the problems grow. I'm very excited to see how much the private sector has stepped up on these issues in the last few years, and I look forward to hearing about the efforts of the companies and organizations represented here today. But I also want to talk about the federal role in this partnership and in particular, the role of the National Science Foundation.

NSF is one of the most important sources of funding for education research. Industry rightly wants to put their money into proven programs. For that to happen, somebody has to provide the funding to develop and prove out those programs. NSF grants allow education researchers and organizations to test out and evaluate new ideas, and to improve our understanding of how people learn and what effective pedagogy really means. Much of what we know and use in STEM education today started out with NSF funding.

Unfortunately, our Federal investments in STEM education, including at NSF, have stagnated and are even being questioned. This is not a good strategy for educating and training our next generation of STEM workers and strengthening American competitiveness. We must continue to address this challenge, so I hope this first hearing on STEM education is one of many during this Congress, and that future hearings will look at the role of other stakeholders, including the Federal Government.

U.S. researchers and universities – which attract top-notch students from many nations – remain the best in the world. However, we can't take this leadership for granted. As other countries take bold steps to match and surpass our progress, we must all work together so that the U.S. remains the most innovative country in the world. I look forward to working with all my colleagues to ensure that we are doing our part.

I want to thank Chairman Bucshon again for calling this hearing, and the witnesses as well for taking the time to offer their insights today.

And with that, I yield back.