

Worcester Polytechnic Institute  
100 Institute Road  
Worcester, MA 10609

March 23, 2015

President of the United States  
The White House  
1600 Pennsylvania Avenue NW  
Washington, DC 20500

Dear Mr. President,

Worcester Polytechnic Institute (WPI) introduced a radically new curriculum in 1970 to address the need to connect engineering students with authentic engineering and societal problem solving through large scale projects conducted outside of courses and with close advising from faculty mentors. Both a disciplinary and an interdisciplinary project are degree requirements at WPI, that is, every student must demonstrate their ability to understand a problem, propose and evaluate solutions, implement a solution and present the outcomes. We conduct approximately 1000 distinct and unique problems every year across all years of our curriculum.

Since the introduction of our project based curriculum we have continued to expand upon our projects oriented educational approach through the introduction of our Global Perspectives Program that sends students to any of more than 40 project centers we have created around the world. This program brings students together from various disciplines to work in teams to solve problems that matter to real people in real communities. Most recently, we have introduced a first-year experience we call the Great Problem Seminars in which students learn how to execute research directed at addressing the grand challenges of our world.

Innovation, entrepreneurship and impact are at the heart of every project that our students do. We think the shift to focus on important problems is a crucial step for the development of engineering education and the long-term competitiveness of the United States. We whole heartedly endorse the effort by the National Academy of Engineering to promote the grand challenges as a unifying theme for engineering education.

Sincerely,

David Cyganski  
Bernard M. Gordon Dean of Engineering and  
Professor of Engineering Leadership, ad interim

