

Rising Above The Gathering Storm: Energizing and Employing America for a Brighter Economic Future

Today, Americans are feeling the gradual and subtle effects of globalization that challenge the economic and strategic leadership that the United States has enjoyed since World War II. A substantial portion of our workforce finds itself in direct competition for jobs with lower-wage workers around the globe, and leading-edge scientific and engineering work is being accomplished in many parts of the world. Thanks to globalization, driven by modern communications and other advances, workers in virtually every sector must now face competitors who live just a mouse-click away in Ireland, Finland, China, India, or dozens of other nations whose economies are growing. This has been aptly referred to as “the Death of Distance.”

What are the top 10 actions, in priority order, that federal policymakers could take to enhance the science and technology enterprise so that the United States can successfully compete, prosper, and be secure in the global community of the 21st century? What strategy, with several concrete steps, could be used to implement each of those actions?

The committee identified two key challenges that are tightly coupled to scientific and engineering prowess: creating high-quality jobs for Americans, and responding to the nation’s need for clean, affordable, and reliable energy. To address those challenges, the committee structured its ideas according to four basic recommendations that focus on the human, financial, and knowledge capital necessary for US prosperity.

The four recommendations focus on actions in K–12 education (*10,000 Teachers, 10 Million Minds*), research (*Sowing the Seeds*), higher education (*Best and Brightest*), and economic policy (*Incentives for Innovation*) that are set forth in the following sections. Also provided are a total of 20 implementation steps for reaching the goals set forth in the recommendations.

TASK:

- Your task tonight is to read the section you’ve been assigned and write a brief summary of the recommendation and the implementation of this plan.
- In addition to the summary, come up with 3 open-ended question for our discussion on this tomorrow.
 - questions must not be factually based
 - they will typically have multiple possible correct answers
- The following night you’ll participate in a forum discussion based on your reading and our class discussion.

GROUP 1

10,000 TEACHERS, 10 MILLION MINDS, AND K–12 SCIENCE AND MATHEMATICS EDUCATION:
pages 5-7

GROUP 2

SOWING THE SEEDS THROUGH SCIENCE AND ENGINEERING RESEARCH: pages 7-8

GROUP 3

BEST AND BRIGHTEST IN SCIENCE AND ENGINEERING HIGHER EDUCATION: pages 9-10

GROUP 4

INCENTIVES FOR INNOVATION: page 11-12

ALL GROUPS

CONCLUSION: pages 13-14