

JULY 2008 REVISIONS
***RISING ABOVE THE GATHERING STORM:
ENERGIZING AND EMPLOYING AMERICA FOR A
BRIGHTER ECONOMIC FUTURE***
The National Academies Press, Washington, D.C.
ISBN-13: 978-0-309-10039-7; ISBN-10: 0-309-10039-9

Page 15. Replace the first 3 bulleted items under K-12 Education with the following:

- Fewer than one-third of US 8th-grade students performed at or above a level called “proficient” in mathematics; “proficiency” was considered the ability to exhibit competence with challenging subject matter. Alarming, about one-fifth of the 4th graders and one-third of the 8th graders lacked the competence to perform even basic mathematical computations.¹⁸
- In 1999, 69% of US 5-8th-grade students received instruction from a mathematics teacher who did not hold a degree or certification in mathematics.¹⁹
- In 2000, 93% of students in grades 5–8 were taught physical science by a teacher lacking a major or certification in the physical sciences (chemistry, geology, general science, or physics).²⁰

Page 15. Replace the 5th bulleted item under K-12 Education with the following:

- US 15-year-olds ranked 27th out of 39 countries that participated in a 2003 administration of the Program for International Student Assessment (PISA) examination, which assessed students’ ability to apply mathematical concepts to real-world problems.²²

Page 16. Replace the 6th bulleted item under Higher Education with the following:

- The proportion of bachelor's degrees in physics to total degrees awarded was twice as high the year before Sputnik, deemed a time of dangerous educational neglect, as in 2004.³⁵

*Page 16. Replace the first bulleted item under **Research** with the following:*

- In 2001 (the most recent year for which data are available), US industry spent more on tort litigation than on research.³⁷

Page 17. Replace the first bulleted item at the top of the page with the following:

- Federal funding of research in the physical sciences, as a percentage of gross domestic product (GDP), was 45% less in fiscal year (FY) 2004 than in FY 1976.⁴⁰ The amount invested annually by the US federal government in research in the physical sciences, mathematics, and engineering combined equals the annual increase in US healthcare costs incurred every six weeks.⁴¹

Page 19. Add the following information to footnote 14:

Starting annual salaries for U.S. class of 2005 engineering graduates averaged \$49,567 to \$53,813 depending upon specialty. Fresh engineering graduates might receive starting salaries of \$4,300 to \$8,000 per year at leading Indian companies. See S. Hargreaves. 2005. "College majors that boost your paycheck." CNN-Money.com, August 17. http://money.cnn.com/2005/08/11/pf/college/starting_salaries/index.htm.

M. Kanellos. 2005. "India's Tech Renaissance." CNET News. June 28. http://news.cnet.com/Indias-renaissance-U.S.-style-labor-pains---page-2/2009-1041_3-5752021-2.html?tag=st.num.

Page 20. Replace footnote 35 with the following:

³⁵American Physical Society. 2007. APS News. August/September.

Page 20. Add the following information to footnote 37.

Towers Perrin. 2006. U.S. Tort Costs and Cross-Border Perspectives: 2005 Update. Available at: www.towersperrin.com.

Page 20. Replace footnote 40 with the following:

⁴⁰American Association for the Advancement of Science. "Trends in Federal Research by Discipline, FY 1976-2004." October 2004. Available at: <http://www.aaas.org/>.

Page 20. Replace footnote 41 with the following:

⁴¹Centers for Medicare and Medicaid Services. "National Health Expenditures." 2005. Available at: <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf>.