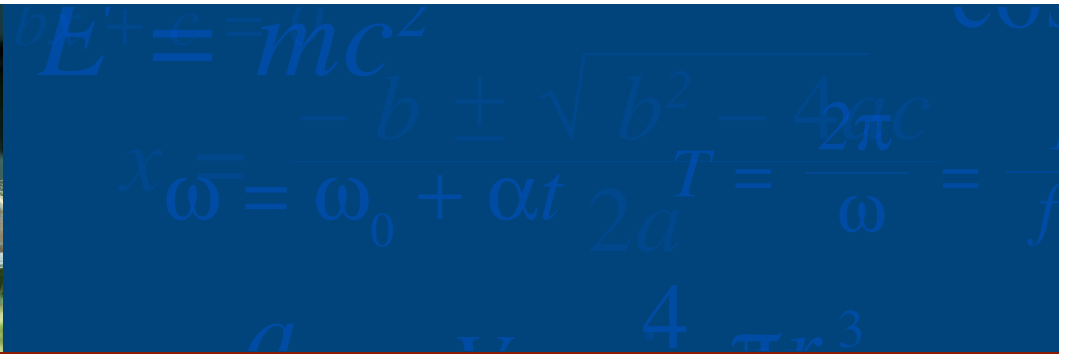


DID YOU KNOW?



The United States ranks 17th among nations in high school graduation rate and 14th in college graduation rate.

Only 29 percent of American fourth grade students, a third of eighth grade students, and barely 18 percent of 12th grade students perform at or above the proficient level in science.

About a third of high school mathematics students and two-thirds of those enrolled in physical sciences have teachers who did not major in the subject in college — or are not certified to teach it.

“The Labor Department projects that by 2014 there will be more than 2 million job openings in science, technology and engineering, while the number of Americans graduating with degrees in those subjects is plummeting.” – The Economist, April 12, 2008

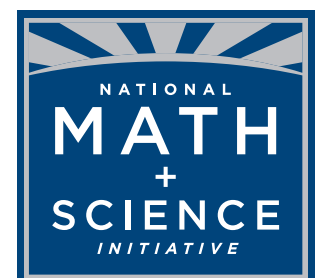
U.S. students recently finished 15th in reading, 19th in math and 14th in science in the ranking of 31 countries by the Organization for Economic Cooperation and Development.

Those American undergraduates who leave science and engineering majors for other majors are often highly qualified, and they are disproportionately women and students of color. Only 20 percent of students enrolled in engineering are women and less than 13 percent are African-American or Hispanic.

In 2000, the number of foreign students studying physical sciences and engineering in U.S. graduate schools surpassed, for the first time, the number of U.S. students.

To learn more, visit:

www.nationalmathandscience.org



MULTIPLYING SUCCESS

Corporate America has a business interest in creating more homegrown engineers, amid growing evidence of an impending shortage. In the U.S., 62 percent of doctoral degrees in engineering went to foreign nationals in 2006, compared with 50 percent in 2000, according to a recent report from the American Society for Engineering Education. It took slightly less than a decade for the U.S. trade balance in high-technology manufactured goods to shift from a positive \$40 billion in 1990 to a negative \$50 billion in 2001.

In *Business Week's* ranking of world information technology companies, only one of the top 10 is based in the U.S.

Only one of the 25 largest initial public offerings (IPOs) of stock in 2006 took place on American exchanges. IPOs in Europe surpassed those in America – in both number and dollar volume.

Nearly 60 percent of patents filed with the U.S. Patent Office in information technology now originate in Asia.

The U.S. share of the world's leading-edge semi-conductor manufacturing capacity dropped from 36 percent to 11 percent in the past seven years.

More than half of all science and engineering degreed workers are 40 years or older and 26 percent are over 50 (National Science Foundation), yet less than 15 percent of U.S. students have the math and science prerequisites to be successful (Southern Methodist University). Eighty percent of jobs in the next decade will require some form of math and science (National Science Foundation).

American students are increasingly at a global disadvantage. Thirty years ago, more than 30 percent of students attending college world-wide were Americans. Today, the United States can claim only 14 percent – and the number is declining. The rest of the world is becoming more educated (*Tough Choices or Tough Times: The Report of the NEW Commission on the Skills of the American Workforce*, National Center on Education and the Economy, 2007).

During much of the 20th century, Americans entering the workforce were considered the best educated in the world. But within the past 30 years, foreign countries can claim a higher percentage of their entering workforce with the equivalent of a high school diploma – and the United States continues to be surpassed (*Tough Choices or Tough Times: The Report of the NEW Commission on the Skills of the American Workforce*, National Center on Education and the Economy, 2007).