

In 21st Century, Plenty Of Reasons To Improve U.S. Science Education

(NAPSA)—U.S. science education may be even more important than many realize for a surprising reason—security.

A new Gallup survey commissioned by Bayer Corporation finds Americans are overwhelmingly cognizant of the critical role science and technology (S&T) play in U.S. security both at home and abroad, but concerned whether today's students have the skills necessary to produce the science excellence required for future homeland security and economic leadership.

In the *Bayer Facts of Science Education IX*, Americans say that the military and other agencies assigned to protect us rely heavily on S&T and that America's new emphasis on homeland security will create new S&T job opportunities for today's students. At the same time, they are concerned that these students are not being prepared educationally for these and other S&T jobs. In fact, in their view, improving pre-college science and math education is a major national priority that must be addressed for both economic and security reasons. And, they believe, industry has an important role to play in the effort.

"The events of the last two years clearly have had a profound effect on the collective American consciousness. September 11, the anthrax attacks, the wars in Afghanistan and Iraq and the continuing terror alerts have given Americans a keen appreciation for the role science and technology play in an aspect of life that is not always top-of-mind," said John Payne, President and General Manager of Bayer HealthCare LLC-Animal Health Division, North America, and Chairman of

Science Education: Whose Business Is It?

In the *Bayer Facts of Science Education IX*, Americans endorse the following company-sponsored science education programs:

- Employee-volunteer programs that bring scientists, engineers and technicians into classrooms to work with students and teachers.
- Internship programs for *high school students* that bring students into companies to interact with scientists, engineers and technicians.
- Internship programs for *K-12 science teachers* that bring the teachers into companies to interact with scientists, engineers and technicians.
- One-on-one mentoring programs that match scientists, engineers and technicians with middle and high school students.

Conducted by The Gallup Organization



Bayer's *Making Science Make Sense* program—a company-wide initiative that supports hands-on, inquiry-based science learning, employee volunteerism and public education. "Americans increasingly recognize that science and technology do not just provide us with new medicines, better electronics and hi-tech gadgets. They are on the front lines along with first responders, defending and protecting us and the country."

In the survey, science literacy emerges as a powerful tool not only for professionals engaged in security, but for average Americans. Those polled say it is important for today's adults to be science-literate in order to understand and deal with potential terrorist threats like bioterrorism, nuclear terrorism

and cyberterrorism.

How can we ensure a science-literate American citizenry? The experts say it begins with quality science education that starts in elementary school. They favor replacing traditional textbook-based education with hands-on science learning that helps students develop science literacy skills including critical-thinking, problem-solving and working collaboratively with others—and Americans agree. However, some lack confidence in elementary schoolteachers' ability to teach science compared to other basic subjects like math, reading and writing. In an earlier *Bayer Facts* survey, elementary schoolteachers themselves said science is the subject they feel least qualified to teach.

How can we ratchet up the quality of U.S. science education? Almost all Americans agree that it is important for companies that employ S&T workers to play an active role in improving pre-college science education.

"With Americans nearly unanimous in their views that improving pre-college science and math education is a national priority, and that teaching science in a hands-on, inquiry-based way is preferable in today's complex scientific and technological world, they're sending a very strong message to those who have a stake in strengthening the nation's education infrastructure," said Bayer's Payne.

"Now, it's up to each of the stakeholders—parents, educators, legislators and business leaders—to get involved, support reform efforts and see to it that change really does occur."

For more information, please visit www.BayerUS.com/MSMS.