Increasing science literacy and public understanding of the importance of science and technology in everyday life are keys to improving human welfare. AAAS strives to advance science education through two program areas: Education and Human Resources, and Project 2061. During 2004, AAAS education programs made strong strides in promoting the highest possible science standards in schools, while also working to boost the science and technology workforce.

After-School Science Clubs Go Kinetic
Kinetic City, the Association’s popular online science-learning game for children, turned up in another 49 after-school clubs in 2004, thanks to an agreement with the U.S. Air Force Service Agency. Nationwide, the AAAS game — a fun, interactive way for students in kindergarten through sixth grade to learn basic scientific principles — is being played in some 130 clubs. It also recently won a prestigious Codie Award, presented by the Software and Information Industry Association. Go to www.kineticcity.com.

Inquiry Methods Engage More Students
Engineering enrollment at Itasca Community College has jumped from four to 130 students since 1983. First-generation students, many from blue-collar Minnesota families, are benefiting from one of many innovative, inquiry-based efforts showcased in a new report from the National Science Foundation and AAAS, *Invention and Impact: Building Excellence in Undergraduate Science, Technology, Engineering, and Mathematics (STEM) Education*. The book, based on a 2004 conference on NSF’s Course, Curriculum, and Laboratory Improvement (CCLI) program, “is the first truly comprehensive volume on undergraduate educational reform efforts across all the STEM fields,” said Yolanda George, deputy director of Education and Human Resources at AAAS. See www.aaas.org/publications/books_reports/CCLI.

Standing Our Ground for Diversity
In 2004, more than a year after the U.S. Supreme Court affirmed the value of diversity in higher education but struck down points-based approaches to undergraduate admissions, a new report helped clear up confusion created by the dual rulings. *Standing Our Ground: A Guidebook for STEM Educators in the Post-Michigan Era*, released by AAAS and NACME, the National Action Council for Minorities in Engineering, clarifies legally defensible options for protecting diversity in science and engineering programs. The report emerged from a conference sponsored by the Alfred P. Sloan Foundation. See www.aaas.org/standingourground.

Advancing Science and Engineering Capacity
The new Center for Advancing Science and Engineering Capacity, headed by Daryl Chubin, works to boost the ranks of U.S. scientists and engineers. Established in 2004 with a $400,000 grant from the Alfred P. Sloan Foundation, the Center consults with colleges and universities to increase science and engineering participation by all students — especially women and minorities. Chubin’s group also works with the Center for Careers in Science and Technology (CCST), where Director Shirley Malcom emphasizes training, mentoring, and resources. She helps support the National Postdoctoral Association (NPA), too. The NPA was launched under a Sloan grant with support from AAAS and Science’s Next Wave career site. Read more at www.aaas.org/programs/centers.
Fixing U.S. Voter Technology
Top election-technology experts — convened by AAAS for a high-level conference — warned that the U.S. voting system is broadly vulnerable to error and abuse. They called for reforms to make results more reliable and to promote better access by voters, especially those who have experienced roadblocks to exercising their right to vote. “Within the roots of the system, there may be a connection to disempowerment and disenfranchisement,” said Shirley Malcom, AAAS’s director of Education and Human Resources, who co-organized the panel, with AAAS Science and Policy colleagues Mark Frankel and Stephen Nelson. See www.aaas.org/news/press_room/election.

Improving Science Curriculum
Helping all K-12 students achieve science literacy — regardless of culture, language, gender, interests, or learning styles — is a core mission of the Center for Curriculum Materials in Science (CCMS), part of AAAS’s Project 2061. With collaborating institutions such as Northwestern University, Michigan State University, and the University of Michigan, the Center helps K-12 teachers improve science curriculum materials. In 2004, more than 60 science-curriculum experts convened for a Knowledge Sharing Institute, sponsored by CCMS at Northwestern. For background, go to www.scientematerialscenter.org.

Are Benchmarks Being Met?
Set forth in 1993, Project 2061’s Benchmarks for Science Literacy continue to guide science education in every state in the nation. But how can teachers be sure that K-12 students are truly learning the benchmarks? With funding from the National Science Foundation, AAAS’s Project 2061 launched a five-year effort to develop better tools for assessing science and mathematics learning at the middle and early high-school levels. Go to www.project2061.org/research/assessment.htm.

High Blood Pressure — Demystified
The latest free, consumer-friendly health booklet from AAAS, The Science Inside: High Blood Pressure, explains in plain language what health professionals know about high blood pressure, or hypertension, a leading cause of heart disease and stroke. The booklet is part of AAAS’s Healthy People Library Project, which provides general consumers, including minority groups, with easy access to current, reliable information on selected health topics. Previous titles include Diabetes and Having Healthy Babies. See www.healthlit.org.

Online Career Resources

“It’s all back. The fact that [learning benchmarks on evolution] are in the standards is a very important first step, and Georgia should be proud of that. This is a very powerful set of standards.”

— Jo Ellen Roseman, director of Project 2061 at AAAS, commenting in the Atlanta Journal and Constitution on Georgia’s decision to reinsert evolution into state science standards

“With the U.S. facing an unprecedented shortage of physical scientists, it’s no longer possible to ignore what physicist Shirley Ann Jackson of the American Association for the Advancement of Science (AAAS) calls the ‘underrepresented majority’: women, African Americans and Latinos as well as nontraditional white males. ‘Who will be the next generation of scientists and engineers?’ she asked. ‘How can we even discuss preparing for human exploration to the moon and Mars without discussing who will do the science to get us there?’ For now, it’s a ‘silent crisis,’ she said.”

— K.C. Cole, reporting in the Los Angeles Times