AAAS Fighting to Defend the Integrity of Science Education

With evolution on trial in Pennsylvania and under renewed attack by the Kansas State Board of Education, AAAS has stepped up its high-profile campaign to protect the integrity of science education by defending the scientific underpinnings of evolution and making clear that science and religion should not be pitted against each other.

In a series of interviews, press briefings, and op-ed commentaries, AAAS Chief Executive Officer Alan L. Leshner and other AAAS officials have stressed that most religious leaders accept evolution and that many scientists are religious. But, they said, leaders of the intelligent design movement who claim scientific motives are actually trying to undermine science—at significant risk to U.S. students.

The world’s religions “bring great value to many people’s lives,” said AAAS President Gilbert S. Omenn. But “they do not prepare students for a world in which math, science, and empirically tested evidence are essential” for advancing human health, security, and economic progress.

“We have a well-established tradition of separation of church and state,” Omenn said. “Forcing creationism or its slightly modernized incarnation as ‘intelligent design’ into the schools, let alone the science classroom, violates this basic tenet of American society. As many clergy vigorously agree, let’s encourage children and adults to practice their religion in their places of worship and their homes, and protect the precious time that children have in school.”

The controversy over teaching evolution in public school science classes has been a recurring part of American culture—and a continuing interest of AAAS. In the 1920s, AAAS supported the teaching of evolution and raised money to help defend Tennessee biology teacher John Scopes. Throughout the past decade, AAAS’s Dialogue on Science, Ethics, and Religion (DoSER) has produced conferences and books on the issue.

The controversy has been building again in recent years, with anti-evolution efforts in more than 20 states. But two events this year have pushed it into national headlines.

A trial began last month in U.S. District Court in Harrisburg, Pennsylvania, featuring eight families who sued the Dover Area School District for requiring 9th-grade biology students to hear a statement that questions evolution and promotes intelligent design (ID).

In the weeks leading up to the trial, Leshner was a guest on ABC’s World News Tonight, NBC Nightly News, MSNBC-TV and National Public Radio. After a teleconference, Leshner and Eugenie Scott, executive director of the National Center for Science Education, were cited by the Washington Post, the Philadelphia Inquirer, China’s Xinhua news agency, and others.

He also was quoted by New York Times Magazine columnist William Safire. “Whether or not there is or was an intelligent designer is not a scientific question,” he told Safire. “It’s not an alternative to evolution. What they are trying to do is get religion in the science classroom.”

As the trial began, a column written by Leshner was published in the York (Pennsylvania) Dispatch, a leading daily newspaper in the Dover area. “Despite their professed devotion to science, ID advocates have published nothing in mainstream, peer-reviewed journals,” he wrote. “Their allies in the sciences are few, and mostly fringe players.... Finding a few scientists who endorse a belief does not make it science.” A similar column was published in three other Pennsylvania newspapers: the Allentown Morning Call, the Scranton Times, and the Harrisburg Patriot-News.

Albert H. Teich, AAAS head of Science and Policy Programs, defended the teaching of evolution in an August appearance on CNN. DoSER Director Connie Bertka told the Philadelphia Inquirer that the controversy would not end with the trial. “This will continue to be a problem until, as a society,
we come to grips with it,” she said.

In Kansas, meanwhile, AAAS Fellow John Staver went before the Board of Education on 13 September to complain of “inaccurate” and “misleading” information in the board’s proposed new science standards. The standards redefine science, he said, so that science might allow for supernatural explanations of the natural world.

The prevailing definition is “one of the primary reasons that science has been fruitful in producing useful knowledge,” said Staver, director of the Center for Science Education at Kansas State University.

“We are pleased that AAAS is being proactive and vocal on important and divisive issues, including the teaching of evolution,” said Gerry Wheeler, executive director of the National Science Teachers Association. “AAAS’s ability to translate complex scientific concepts for the general public will help ensure that pseudo-science and other nonscientific ideas do not become a part of science instruction.”

2006 ANNUAL MEETING

Grand Challenges, Great Opportunities

From sustainability to the future of mathematics, from video games to the frontiers of space, the 2006 AAAS Annual Meeting will deliver more cutting-edge science and technology than any conference of its kind in the world.

Under the banner of “Grand Challenges, Great Opportunities,” the meeting is expected to bring thousands of scientists, students, teachers and families to St. Louis, Missouri, from 16 to 20 February, 2006.

Among the highlights:

A nanotechnology seminar will examine promising applications, potential health risks, and broad societal implications.

Family Science Days will feature hands-on workshops and demonstrations to educate and entertain. Last year, they drew nearly 3,000 children and family members.

“Physics and Economics of Virtual Worlds” will examine the video game industry, a cultural and economic force.

The “AAAS Evolution Event for St. Louis—Area Teachers” will expand the dialogue on teaching evolution in U.S. public schools.

“Beyond Pi: Grand Challenges in the Mathematical Sciences” is a daylong event that should have broad multidisciplinary appeal.

Altogether, there will be more than 200 symposia, lectures, seminars, and other sessions. For more about the program and registration, see www.aasmeeting.org.

Agriculture, Food, and Renewable Resources

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Astronomy

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Atmospheric and Hydroospheric Sciences

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Biological Sciences

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