AAU ANNOUNCES NATIONAL DEFENSE EDUCATION, INNOVATION INITIATIVE

The Association of American Universities (AAU), an organization of 62 leading public and private research universities, today proposed a national education and innovation initiative “aimed at meeting the economic and security challenges we will face over the next half-century.”

The initiative, described in a white paper (http://www.aau.edu/reports/NDEII.pdf) issued by AAU today, contains a broad set of recommendations for policy changes and investments, primarily by universities and the federal government, designed to strengthen the nation’s capacity to perform basic, university-based research; cultivate American talent in the sciences, engineering, mathematics, and foreign languages; and continue to attract and retain the best talent from overseas.

Its recommendations include:

For universities:

- Reexamine doctoral education, particularly in science-related and language disciplines, to develop ways to shorten the time it takes to obtain a Ph.D., improve completion rates, and broaden the scope of Ph.D. education to better prepare students for a wide range of careers.
- Take steps to reduce attrition among undergraduates in the sciences as well as under-representation of minorities and women in science-related disciplines.
- Give undergraduate students, as well as current and future K-12 science teachers, greater opportunities to participate in university research.
- Create accelerated teacher certification programs for individuals with expertise in STEM and foreign language and area studies disciplines.

For the federal government:

- Increase federal investment in basic research supported by the National Science Foundation, NASA, and the Departments of Energy, Defense, Homeland Security, and Commerce by 10 percent annually for the next seven years, and continue to grow the investment thereafter.
- Increase by 5,000 the number of graduate fellowships and traineeships supported by current programs at federal science and education agencies, create a new graduate fellowship and traineeship program at the Department of Energy Office of Science, and expand the Department of Defense National Defense Education Program to generate talent to ensure future economic, energy, and national security.
- Build on the Administration’s National Security Language Initiative by expanding federal foreign language, area studies, and study abroad programs.

(MORE)
The AAU white paper points to the country’s need to address economic challenges from the emerging economies of Asia as well as post-9/11 national security threats. It cites as a model the bold actions taken by the federal government to maintain American economic and military leadership following the 1957 launch of the Sputnik satellite by the Soviet Union.

The name of the AAU initiative, the National Defense Education and Innovation Initiative, is based in part on the National Defense Education Act (NDEA). In the years immediately following Sputnik, Congress enacted the NDEA, which dramatically upgraded education at all levels; tripled the federal investment in basic, university-based research; and created NASA and the Department of Defense’s Advanced Research Projects Agency (now known as DARPA).

“When the Soviets launched Sputnik, this nation realized we would need to rely on scientific innovation and a well-educated workforce that could conduct research, develop technology, and understand the languages and cultures of nations posing challenges to America’s leadership,” said AAU President Nils Hasselmo. “Now we need to apply this lesson to the nation’s contemporary challenges.”

He added, “The last year has seen an extraordinary output of reports by business and academic groups (http://www.aau.edu/research/CompetitivenessDOCS.pdf), particularly “Rising Above the Gathering Storm,” by the National Academies, and AAU’s white paper is intended to complement these reports. We have included some of their recommendations among our own, but one very important element that we are contributing to the discussion is specific recommendations for the higher education community, and particularly research universities.”

“While the federal government must play a leading role in addressing these challenges, the AAU white paper makes clear that an effective response needs to employ the teaching and research capacities of America’s universities and colleges,” said Purdue University President and current AAU Chair Martin Jischke. “Higher education, and particularly research universities, must reexamine the way we train students in these critical disciplines in order to ensure that we produce the scientists, mathematicians, engineers, linguists, and cultural experts our country needs.”

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The Association of American Universities (AAU) is an association of 60 U.S. and two Canadian research universities organized to develop and implement effective national and institutional policies supporting research and scholarship, graduate and professional education, undergraduate education, and public service in research universities.