

## TESTIMONY

### **Talking Points on Strengthening the National Security Workforce and Promoting Education in Areas Critical to National Security**

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Subcommittee on International Security, Proliferation and Federal Services  
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-- Draft --

Thank you for inviting me to testify before you this afternoon.

I commend you for taking up these issues of critical importance to our national security.

In order for the United States to exercise international leadership, America must have a highly educated population and a national security workforce of the highest caliber. The Homeland Security Federal Workforce Act (S. 1800) and the Homeland Security Education Act (S. 1799) would make a major contribution towards strengthening our nation and our national security workforce -- by:

- encouraging talented people to go into government service;
- promoting exchanges and collaboration among national security agencies;
- and encouraging young people to study the fields, such as math, science and foreign languages, that are critical to our nation's success.

Over the past few years, I served on the United States Commission on National Security/21st Century, which was commissioned by former Defense Secretary Cohen to look at the long-term national security challenges facing the nation and to propose policies and reforms to meet those challenges.

One of our principal conclusions was that the federal government must focus more attention and resources on the human requirements for national security. We concluded that, "The maintenance of American power in the world depends upon the quality of U.S. government personnel, civil and military, at all levels... The U.S. faces a broader range of national security challenges today, requiring policy analysts and intelligence personnel with expertise in more countries, regions, and issues... We must take immediate action in the personnel area to ensure that the United States can meet future challenges."

Our commission also emphasized the importance of promoting high-quality education in areas, including the sciences, math, information technology, engineering, and foreign languages, which are critical to national security. We concluded that, "The capacity of America's educational system to create a 21st century workforce second to none in the world is a national security issue of the first-order... If we do not reverse negative educational trends -- the general teaching shortage, and the downward spiral in science and math education and performance -- we will be unable to maintain our position of global leadership... We believe strongly that America's future depends upon the ability of its educational system to produce students who constantly challenge current levels of innovation and push the limits of technology and discovery".

In today's world of both great danger and great opportunities, we need a multifaceted and comprehensive approach to national security challenges. We need all instruments of national power at our disposal -- including diplomatic, economic, and military tools,

and our nation's unmatched expertise in many areas. We need to organize our national security apparatus so that diplomatic, economic and military efforts are integrated and synchronized.

The ability to carry out effective foreign and national security policies requires talented professionals in many levels of government. We need engineers, biologists, physicists, computer specialists, and linguists every bit as much as soldiers and politicians.

America's strength has always been tied to the innovation and entrepreneurial talent of its people. Only a well-trained and educated population can thrive economically in the 21st century, thereby creating the national prosperity that provides the foundation for national strength.

The government needs to encourage the education necessary for developing the skills that are critical to our 21st century national security, and it must attract and retain a top-flight national security workforce.

### **1. The national security workforce**

May I say a few words about our national security workforce.

Although there has been a renewed public interest in national security work since September 11, the U.S. government faces a serious problem in attracting and retaining talented people for key jobs in national security departments and agencies.

Part of the problem is that jobs in the private sector often carry higher salaries and provide greater opportunities for advancement and career development.

An additional problem is that the civil service does not provide sufficient opportunities for people to work in various departments and agencies and thereby gain exposure to a broader range of issues and gain greater experience in the interagency process.

In today's world, traditional national security agencies, such as State, Defense, and the NSC, need to work together in new ways, and economic agencies, such as Treasury and Commerce, need to work closely with the national security community. People working in these agencies should be given greater opportunities to move from one agency to another.

**National Security Service Corps:** To promote greater interagency movement and collaboration, the National Security Commission recommended the establishment of a National Security Service Corps that would broaden the experience base of senior departmental managers and develop leaders skilled at producing integrated solutions to U.S. national security policy problems. We recommended that participating departments should include Defense, State, Treasury, Commerce, Justice, and Energy -- but not the intelligence community so that the firewall that exists between intelligence support and policymaking would be preserved.

I strongly support the provision in S. 1800 for the establishment of a National Security Service Corps. The bill correctly points out that such a corps would help to invigorate the national security community by providing for more exciting and professionally rewarding opportunities. The corps would strengthen the government's capacity to protect and promote our national security.

**Student loan repayment and fellowships:** I also support strongly the provisions in S. 1800 that would:

-- 1) establish a pilot program for student loan repayment for federal employees in national security positions;

-- and 2) establish fellowships for graduate students in fields critical to national security who commit to government service.

The National Security Commission made recommendations similar to these proposals. We recommended the deferral of student loan repayments for individuals who serve in government after completing their education in fields related to work in national security. We additionally proposed that Congress should expand the National Security Education Act to include broad support for social sciences, humanities, and foreign languages in exchange for military or civilian service to the nation.

Enactment of these proposals would encourage more people to enter national security positions by easing the financial sacrifices often associated with graduate study and with government service. The measures would encourage more people to study math, science, foreign languages, and other fields critical to national security, and they would make it easier for people who enter government service to pay off their student debts.

## **2. Elementary, secondary, and undergraduate education**

Now, may I say a brief word about education at the elementary, secondary, and undergraduate levels.

**Science and technology:** The National Security Commission concluded that America's need for many well-trained people in science, math, computer science, and engineering is not being met, and that if we do not address this problem, America's position as a global leader will be challenged.

As the internationalization of science and technology activities, assets, and capabilities is accelerating, U.S. advantages in many critical fields are shrinking and may be eclipsed in the years ahead.

One reason for the problem is that American students know that professional careers in math and science require considerable preparation and effort, while salaries are often more lucrative in areas requiring less demanding training. Non-U.S. nationals, however, find these professions attractive and they increasingly fill American university graduate seats and jobs slots in these areas.

The American education system needs to produce significantly more scientists and engineers to meet our nation's anticipated demand and maintain our global leadership in science and technology.

Expertise in science, math, and engineering is especially critical for the defense industry, which must simultaneously develop and defend against the most advanced technologies.

Expertise in these fields is also critical to American success in the global economy. The continuing advance of globalization puts a premium on expertise in a wide range of areas, including science, technology, and engineering.

To address this challenge, we need educational incentives to encourage students to pursue careers in science and technology, and we need to develop more qualified math and science teachers in our elementary and secondary classrooms.

The National Security Commission recommended a National Security Science and Technology Education Act, which would provide:

-- reduced interest loans and scholarships for students to pursue degrees in science, math, and engineering;

- loan forgiveness and scholarships for people in these fields entering government or military service;
- a national security teaching program to foster science and math teaching at the elementary and secondary levels;
- and increased funding for the professional development of science and math teachers.

The commission also recommended special efforts to promote math, science, and engineering education among minorities and in low-income communities.

The commission's recommendation to increase funding for the professional development of science and math teachers deserves to be underscored. The National Commission on Mathematics and Science Teaching for the 21st Century (known as the Glenn Commission) estimated that the nation will need 240,000 new science and math teachers over the next decade. The National Security Commission supported the Glenn Commission's finding that \$174 million in new funding is needed to bring additional science and math teachers into the profession.

The National Security Commission further recommended substantial increases in the salaries of public secondary school science and math teachers to make their salaries more comparable to what science and math professionals could earn in the private sector. Currently the average salary of an entering science and math professional in the private sector is \$50,000, while the average starting teacher earns \$25,000.

**Foreign languages:** Also critical for success in today's world is proficiency in foreign languages. After 9/11, it is more clear than ever that we need people who speak foreign languages and understand other peoples and cultures. We simply do not have enough people trained in the languages spoken in many parts of the world, including the Middle East and Central and South Asia. Language proficiency is essential to understand the threats -- and the opportunities -- facing us across the globe.

Language proficiency is not just essential for intelligence collection -- though it is critical for that; it is also essential for the pursuit of the vast array of U.S. political, economic, and military goals.

We need Americans with experience developing relationships with people of other cultures and languages in order to strengthen political ties with other nations, advance free trade, and improve military-to-military cooperation. When crises develop or conflicts erupt in far-flung places, we need people that are knowledgeable about those places and can help us understand what is happening there.

The U.S. government already requires more than 34,000 employees with foreign language skills, and it is unable to fill all of those positions with well-qualified people. The need for people with foreign language skills will only grow in the coming years.

**S. 1799:** Given our nation's need for more expertise in math, the sciences, and foreign languages, I strongly support S. 1799. I particularly support its provisions to:

- provide loans to undergraduates in engineering, science, math, or foreign languages;
- strengthen science and math instruction in elementary and secondary schools;
- and promote foreign-language education by encouraging greater training of foreign-language teachers and the development of more rigorous foreign language education, particularly in less-commonly taught languages that few Americans are proficient in.

These measures could have a significant impact on strengthening our nation's expertise

in areas critical to national security.

### **Conclusion**

The many and complex challenges of the war on terrorism underscore the need for the U.S. to have a top-flight national security workforce, and to remain at the forefront of trends in science and technology. The devotion of greater attention and resources to the human requirements for national security is an essential part of a successful U.S. strategy to win the war on terrorism and advance our many other foreign policy goals.

I commend you for your consideration of these critical issues, and strongly support the Homeland Security Federal Workforce Act and the Homeland Security Education Act.

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