The Importance of Nonproliferation Education and Training

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It is an honor to be the keynote speaker at a conference celebrating twenty years of an institution that has done so much for nonproliferation education and for nonproliferation itself. I am a practitioner in an academic setting. My career was entirely within the US government, yet this volume contains a virtual who’s who of international nonproliferation expertise. My background is exclusively nuclear. I view nonproliferation through all three of those lenses. So if I seem to slight other perspectives, it is not that I think they are unimportant but that, like all of us, I am shaped by my experience.

I want to take you back twenty years to the founding of what we now call the James Martin Center for Nonproliferation Studies. Twenty years isn’t that long a time, but the world of 1989 was very different from our world today. First, of course, it was dominated by the Cold War confrontation between the United States and the Soviet Union. One of the few areas where the two superpowers agreed was nonproliferation. Curiously, that led the US government to relegate nonproliferation to specialists. After all, it wasn’t part of the central challenge of the age. Besides, nonproliferation was a success. We had the same five nuclear weapons states that had existed for a quarter century. Everyone knew that India had exploded something a decade and a half ago, but we thought nothing would come of it. Pakistan was—we hoped—constrained by the Pressler Amendment. And we didn’t mention Israel in polite company (some things haven’t changed). There was one more state possessing nuclear weapons—South Africa—but few were aware of it and almost no one knew any details.

Arms control was, of course, important because it helped regulate the arms race and the military relationship with the Soviet Union. But we didn’t think much about its connection to nonproliferation. Instead, we treated arms control and nonproliferation as separate subjects within the US government. Many outside government did as well. In part, that was because we saw the link between the two—Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)—as nothing more than an aspirational goal, one to be included in treaty preambles and visionary speeches, but having little practical effect. We didn’t think about nuclear terrorism at all.

In the non-nuclear area, the Biological Weapons Convention had existed for years but had little relevance to day-to-day security thinking. Probably the most exciting nonproliferation feature of 1989 was the ongoing negotiation of a Chemical Weapons Convention, a prospect of particular interest to President George H.W. Bush.
It was in this very different world, that Bill Potter founded the Center for Nonproliferation studies. In its entirety, it included fewer than twenty people. In the intervening twenty years the Center has grown to become is the largest nongovernmental organization in the United States devoted exclusively to research and training on preventing the proliferation of weapons of mass destruction.

Those twenty years have seen major changes in the world. There have been important successes for nonproliferation. They include:

- § The signing of and widespread adherence to the Chemical Weapons Convention.
- § The indefinite extension of the NPT.
- § The signing of the Comprehensive Nuclear-Test-Ban Treaty and the continuing moratorium on nuclear testing by all the NPT-recognized nuclear weapons states.
- § South Africa’s stunning decision to eliminate and reveal its nuclear weapons program, the only instance of rollback of an indigenous program in history.
- § Ukraine, Belarus and Kazakhstan electing to return to Russia the nuclear weapons they had inherited following the breakup of the Soviet Union and to join the NPT as non-nuclear weapons states.
- § Libya’s decision to abandon its pursuit of weapons of mass destruction.
- § The strengthening of the international legal regime through the IAEA Additional Protocol, UN Security Council Resolution 1540, and UN Security Council Resolution 1887.
- § The continued slow expansion of nuclear weapons free zones.
- § Complementing the international legal regime with less formal means of thwarting proliferation, such as the Proliferating Security Initiative.

There have also been some stunning failures, including:

- The nuclear weapons tests by India and Pakistan, which caught the United States—and many others—completely by surprise.
- The inability to bring the CTBT into force or to agree on a verification protocol for the Biological Weapons Convention.
- The decade-long gridlock in the Conference on Disarmament.
- The inability of the international community to prevent North Korea, and perhaps Iran, from acquiring nuclear weapons.
- The failure to recognize how close Iraq was to a nuclear capability in the first Gulf War and how far it was from one in the second Gulf War.

Finally, there was a major transformation following September 11, 2001. Twenty years ago, almost any American hearing the term “nuclear threat” would have thought of the risk of a massive nuclear exchange with the Soviet Union. Today those same words conjure up the specter of nuclear terrorism. Many Americans believe that thwarting nuclear terrorism is so important that it should be regarded as a fourth pillar of the international regime, taking its place alongside nonproliferation, disarmament, and the peaceful uses of nuclear energy.
Why do I rehearse this history? Because, it seems to me, we can draw lessons for nonproliferation education and for this conference from it. The first lesson is that we are often surprised. After the Indian and Pakistani tests in the late 1990s, Admiral David Jeremiah led a review of why the intelligence community had missed such an important event. One part of the problem was a mindset. Analysts “knew” that there wouldn’t be testing. There hadn’t been before and they were sure the future would mirror the past. We need to educate analysts and policy makers who are well grounded in history and technology but retain the ability to constantly challenge their assumptions. That’s a daunting task.

A second lesson is that when the United States works effectively with regional partners and international organizations it is successful in advancing a solid nonproliferation agenda. When it doesn’t consider the perspectives of others, it is often less successful. Look, for example, at the proposals for limiting enrichment and reprocessing President Bush made five years ago. They made perfect sense from a US perspective but floundered because the United States failed to understand the importance many states placed on not abandoning rights that the major powers retained. The next generation of nonproliferation experts will need to understand the culture of international organizations and the perspectives, interests and security considerations of prospective partners.

Third, in a democracy, no program, no matter how intellectually sound, can endure without public support. Nonproliferation is complicated. Details matter. Americans sometimes have trouble understanding why it is in the long term security interests of a strong country to tie its hands by adhering to international regimes. The nonproliferation leaders of the future need to be able to explain complex concepts to non-specialists in a way that is comprehensible without losing nuance or failing to acknowledge alternate perspectives.

Finally, issues are often interconnected. The most obvious recent example is the link between nonproliferation and countering terrorism. But we must also understand the link between disarmament and nonproliferation, between legal regimes and informal arrangements, between expansion of nuclear energy and prevention of material diversion. One of the strengths of CNS has been its synergistic approach, combining a deep understanding of policy, technology and linguistics. The nonproliferation practitioners and theoreticians of the future will need to apply this same principle more broadly. CNS is, of course, already moving in this direction.

We don’t know all the challenges the future will bring. But a few are clear: Iran and North Korea, dealing with the international fuel cycle, the increasing tension over Article VI of the NPT. But the farther we seek to peer into the future, the cloudier our vision becomes. Return to 1989 for a moment. How many of the developments I listed would we have predicted then? In 1991, I negotiated a major treaty with the Soviet Union. I spent huge amounts of time studying my negotiating partner. Less than five months after I watched our respective presidents sign that treaty, the other country vanished. I never saw it coming. Something equally important and equally unforeseen may well happen in the next decades.
Both the problems we can foresee and those we cannot will require exceptionally qualified analysts and practitioners. We will need anew generation of nonproliferation experts to develop policy, to implement it and to explain it. It is the job of the current nonproliferation leadership, many of whose voices appear in this collection, to help that next generation acquire not only the strongest possible understanding of the technology and policy and culture of nonproliferation but also the skeptical, questioning openness to new ideas and new data that will enable them to deal with the unexpected.