Report

The importance of disarmament and nonproliferation education for the abolition of nuclear weapons

Masako Toki

Nonproliferation Education Program Education Project Manager

James Martin Center for Nonproliferation Studies

Introduction

Even today, a quarter century after the end of the Cold War, the number of nuclear warheads extant in the world exceeds 15,000. While this shows evidence of a trend toward reduction when compared with the more-than-70,000 warheads in existence at the height of the Cold War, the fact is that it is difficult to determine whether this reduction in numbers is linked to any reduction in the risk posed by nuclear weapons.

Of the nuclear-weapons states of the Treaty on the Non-Proliferation of Nuclear Weapons (or Non-Proliferation Treaty, NPT), i.e., the U.S., Russia (the former USSR), the UK, France, and China, the U.S. and Russia account for 90% of the total nuclear stockpiles in the world. While the number of nuclear weapons possessed by these two countries has been dramatically reduced under bilateral

arms control treaties, it appears that the stockpiles of China, as well as those of India and Pakistan, who are not party to the NPT, are increasing in terms of both number and capabilities.

In addition, there are concerns that North Korea, which conducted two nuclear tests in 2016, is improving the performance of its nuclear weapons. Furthermore, in light of the current volatile security environment, the possibility of use of nuclear weapons has become more realistic. This is due largely to threats such as the intensification in recent years of terrorism, as well as tensions in U.S.—Russian relations, now reputed to be at their lowest ebb since the end of the Cold War. Thus, it seems fair to argue that the threat posed by nuclear weapons and the danger of their being used is not at all proportional to their decrease in number.

Nevertheless, the level of the general public's interest in the threat of nuclear weapons is surprisingly much lower than it was during the Cold War. Most citizens are arguably indifferent to concerns such as basic knowledge of nuclear weapons and the actual dangers they represent, and it could also be said that they lack access to sufficient information. In light of these circumstances, when considering today's international security situation from a long-term perspective, building a safe and peaceful world that is free of nuclear weapons increasingly requires efforts to promote disarmament and nonproliferation education. However, it seems that concrete progress in this area has arguably been extremely limited when compared with the existing threat of nuclear weapons.

In this paper, after touching on the "United Nations study on disarmament and non-proliferation education: Report of the Secretary-General," which has played an important role in advancing disarmament and nonproliferation (DNP) education, I consider why DNP education is important for the abolition of nuclear weapons and then briefly introduce various DNP education initiatives underway at the James Martin Center for Nonproliferation Studies (CNS) in the Middlebury Institute of International Studies at Monterey (hereinafter CNS) of which I am a member. I focus particularly on the importance of DNP education for young people toward the realization of a world free of nuclear weapons. In addition, I describe some related challenges and future prospects.

1. Research Related to Disarmament and Nonproliferation Education and the Report of the UN Secretary-General

Historical Background

When discussing DNP education, we cannot ignore the historical background or efforts that have been made in this field on the stage of the United Nations. If the goal of establishing the UN was to bring peace and security into the sorrowful history of people ravaged by war, it was arguably inevitable that DNP education for making progress toward a peaceful world free of nuclear weapons should have been discussed at the UN. Nevertheless, such progress was very limited, and to see the most important developments, we had to wait for the adoption by the UN General Assembly in 2002 of the "United Nations study on disarmament and non-proliferation education: Report of the Secretary-General."

When the urgency of disarmament education was first declared at the first Special Session of the General Assembly devoted to Disarmament (SSOD-1), the importance of both teaching and studying the relevant issues for advancing disarmament education was emphasized. The final document emerging from SSOD-1

recommended that UNESCO adopt gradual measures to develop a program for disarmament and peace studies at various levels of education. In response to this recommendation, the final document coming out of the UNESCO World Congress on Disarmament Education held in 1980 included numerous recommendations for research and education related to disarmament. Some experts take the view that this UNESCO Congress contributed greatly to the subsequent development of disarmament education.

However, after the UNESCO Congress, very little serious discussion of DNP took place at the UN for the approximately two decades leading up to the UN General Assembly's adoption in 2000 of a resolution requesting for the submission of a report on DNP education. While views vary on why this should have been so, one major reason seems to have been the absence of room for substantive discussion regarding disarmament education largely consequential to the ideological conflict between the superpowers during the Cold War.

In that sense, the adoption of the "United Nations study on disarmament and non-proliferation education: Report of the Secretary-General" at the UN General Assembly in 2002 is highly significant. The report derives from a proposal to the then UN Secretary-General Kofi Annan by Dr. William Potter, the director of the CNS as well as a serving member of the UN Advisory Board on Disarmament Matters. The report, sounding the warning that some of the biggest problems involved in promoting disarmament and nonproliferation are the indifference and lack of recognition to the threat of nuclear weapons and an idle disregard of the contemporary crisis, appealed for the need to implement DNP education in order to overcome the contemporary situation.

Outline of the Report

While Kofi Annan, the former UN Secretary-General, has said in the past that "Education is, quite simply, peace-building by another name," I feel that this statement is taking on deeper significance in view of an international security situation that has grown increasingly chaotic.

While the "Report of the Secretary-General" regards education as being extremely important in the field of disarmament and peace, it expresses concern for such education not having been fully utilized. Moreover, the study also confirms that DNP education is becoming more important than ever and that its promotion constitutes an urgent challenge for international security and the sustainable development of society and the economy.

The report includes practical recommendations on 34 items. As stated by Yukiya Amano, who, at the time, played a central role in the group of governmental experts from the 10 countries involved in the preparation of the report and is now the Director-General of the International Atomic Energy Agency, these recommendations are more of a menu than they are a prescription, and it seems that many officials understand that it is most likely practical to move to on-the-ground implementation, which seems most appropriate according to the situations of their respective countries, regions, organizations, and educational institutions.

2. Progress Following the Adoption of the Report

Since the adoption of the report in 2002, UN member states, international organizations, and civil society have begun submitting biennial reports on the status of the implementation of DNP

education. Unfortunately, interest among member states remains low, and the number of countries submitting such reports remains very disappointing—in single digits. In addition, it is also a reality that many of the countries submitting such reports place greater emphasis on deterrence and strategic studies, as well as training and education for those purposes, thus substituting DNP education with this kind of research and education.

In comparison, submissions from the civil society sector have tended to increase and become more fully realized each time in terms of both the number of organizations submitting and the content of submissions. In particular, as a global discussion about the humanitarian consequences of nuclear weapons has intensified in recent years, organizations engaging in disarmament education so as to expand and develop civil society networks seem to be increasing in number as well, becoming more fully realized in terms of their substance.

Particularly in discussions of the catastrophic humanitarian consequences of the use of nuclear weapons, the environmental and human impacts are important considerations for moral and scientific study, and needless to say, disarmament education for this purpose is even more necessary. While some progress has been made since the adoption of the report, such as with the incorporation of the importance of DNP education in texts such as the final document of the NPT Review Conference, it is in the civil society sector that substantial developments are most widely evident.

Ban Ki-moon, who is known for his enthusiasm for promoting disarmament and nonproliferation even among those who have held the UN post of Secretary-General in the past, chose the Monterey campus of the Middlebury Institute of International Studies, which has been engaged in pioneering activities in the field of DNP education, to deliver an important speech on disarmament and nonproliferation in 2013. In his speech, making reference to the 2002 "United Nations study on disarmament and non-proliferation education: Report of the Secretary-General," he pointed out that in some countries, the budget expended on disarmament education was exceedingly small, if at all it existed.

States are under pressure to find solutions to urgent challenges as quickly as possible, and consequently, the sober outlook, as it were, of education may be accorded low priority as a solution to the issues of disarmament and nonproliferation. Furthermore, although the report promotes the cultivation of critical thinking skills, the younger generation has resigned itself to accepting the permanent existence of nuclear weapons without questioning the pros and cons of nuclear deterrence. Ban ki-Moon expressed his concern over such a situation, emphasizing that disarmament education would itself contribute to the further development of a new and creative way of thinking as the sure path to the abolition of nuclear weapons.

3. Specific Examples of DNP Education at Monterey

MA in Nonproliferation Studies

Here, I would like to briefly introduce some examples of DNP education being conducted at the CNS where I work. Since its establishment in 1989 by Dr. William Potter, the center has conducted a wide range of international activities related to research and education on the disarmament and nonproliferation of weapons of mass destruction. Enjoying the strong faith placed in us by international agencies and the U.S. government, we frequently

promote our commissioned research, collaborative research, and educational activities. The Middlebury Institute of International Studies at Monterey has the world's first and only Master of Arts in Nonproliferation and Terrorism Studies, attracting excellent students from all over the world.

This program takes a comprehensive and systematic approach for studying policy and technical aspects related to the disarmament and nonproliferation of all manner of weapons of mass destruction (nuclear, biological, and chemical weapons), as well as delivery systems, namely, long-range missiles. Further, students also study bilateral, regional, and international treaties oriented toward disarmament and nonproliferation, as well as the threats posed by the regional proliferation of weapons of mass destruction and their spread to no state actors.

Within this broad variety of courses, our unique disarmament and arms control negotiation simulation course stands out as being very popular among students. This course makes use of a participatory learning method that is addressed and promoted in the Report of the UN Secretary-General. With this method, students proactively develop their critical thinking skills through simulations that make use of a variety of materials relevant to the topics under discussion instead of the conventional mode of receiving education in a lecture-based format.

The goal of Monterey's disarmament and arms control negotiation simulation is for students to cultivate the ability to consider the issue of disarmament objectively and learn methods and skills relevant to negotiation by acting out the roles of foreign delegates in multilateral and bilateral disarmament negotiations. When performing simulations of disarmament negotiations that take place in the real world, each

Visiting Fellow Program

Every semester, for more than 20 years, the CNS has conducted a Visiting Fellow Program for visiting diplomats and scientists from various countries. As well as participating in lectures on disarmament and nonproliferation by the experts at CNS, Visiting Fellows are required to establish their own research topic to serve as the subject of a paper that they submit when presenting their research at the end of the semester.

The alumni of this program include many diplomats who went on to play important roles in their respective fields of disarmament and nonproliferation after returning to their national governments. In addition, the relationships of trust and friendship that are cultivated through the Visiting Fellow Program are extremely close. Even at international conferences related to nonproliferation and disarmament, because there will be friends in the American and Russian or American and Chinese delegations, who, despite their conflicting national interests, share the experience of the Visiting Fellow Program, its wide-ranging network of human relationships can have various beneficial effects.

For disarmament negotiations, human relationships represent a very important factor. Thus, through our education program, although bound by national interests, the expansion of networks among politicians and researchers who share a common aspiration toward the goal of internationally promoting disarmament and nonproliferation seems to be very meaningful for international security.

This is a common theme through all the educational projects being undertaken at our research center, and many alumni of the Monterey Institute are active in various organizations involved in disarmament and nonproliferation in many countries around the world. These networks include organizations such as the IAEA, foreign ministries and energy agencies of various countries, and academic institutions and NGOs, and we are proud to have become a key player in the promotion of disarmament and nonproliferation.

At the center, while we naturally focus on education and training to improve expert knowledge and skills related to disarmament and nonproliferation, we nonetheless regard the deepening of ties and relationships of trust between experts, expanding networks, and making a significant contribution to international peace and security to be important elements of our mission.

Disarmament and Nonproliferation Education Programs for High School Students

At our research center, where the focus is on training the next generation of leaders in the field of disarmament and nonproliferation, we also implement projects for high school students. The Critical Issues Forum (CIF)—one of the CNS's major projects, designed for the youngest generation—is a program that promotes cross-cultural understanding and DNP education to teachers and students in high schools around the world. This program, by working to cultivate high school students' critical thinking skills, aims to deepen the understanding of the complex and difficult yet important

Every year, a timely topic related to disarmament and nonproliferation is selected with reference to the project leaders, and high school students from the participating schools perform the projects throughout the year under teachers' guidance. First, comprehensive lectures are held on the year's topics in online teacher workshops, with top-level global experts from our center in charge of the workshop lectures. In 2015, to commemorate the 70 years of the atomic bombings of Hiroshima and Nagasaki, the project was held on the topic of "Nuclear Disarmament: Humanitarian Approach," and our first Spring International Conference in Hiroshima enjoyed great success, with honored guests including Japan's Foreign Minister Kishida and Governor Yuzaki of Hiroshima Prefecture in attendance.

In 2015, our Annual International Student Conference, usually held in Monterey, was co-organized with Hiroshima Jogakuin High School in the city of Hiroshima. In recent years, in the context of debates over nuclear disarmament, moves to focus on the humanitarian impact of nuclear weapons have conjured up a new trend. Consequently, in order to acquire basic knowledge regarding nuclear weapons, participants study the current state of nuclear power in the world, states' motivations for possessing nuclear weapons, and an overview of international treaties on nuclear disarmament and nonproliferation with reference to nuclear deterrence. Research has also been conducted into topics such as basic science and technology related to nuclear weapons, as well as the long-term human and environmental impacts in case of the actual use of nuclear weapons. In 2016, we welcomed Dr. William Perry, who was involved in actual

nuclear weapons policy when he served as defense secretary under President Bill Clinton. Dr. Perry engaged in enthusiastic discussions with the CIF participants who are to take the next generation forward, asking them to reflect on how to reduce the risk of nuclear weapons and moreover what they could do in particular to realize a world free of nuclear weapons. Our 2017 meeting is scheduled to be held in Nagasaki for the first time, where our topic will be to study the Comprehensive Nuclear-Test-Ban Treaty, which is so crucial for the abolition of nuclear weapons. Participants are to consider the nature of the global conditions under which this treaty has still not come into force even 20 years after it was opened for signatures and examine what is required to be done for the treaty to come into force. Participating high school students would be devoting serious discussion to the question of how this treaty would be helpful for building a safe and peaceful world free of nuclear weapons. Ultimately, challenges such as having participants suggest solutions on the basis of what they have learned and studied are also to be included.

Since the CIF was launched more than 20 years ago, we have continued to promote DNP education for a great many Russian and American high school students, and until 2012, we targeted primarily high schools in the U.S. and Russia's closed nuclear cities. Since the closed nuclear cities were built to house nuclear facilities and employees' families, people's daily lives and urban activities were conducted primarily in the context of nuclear facilities. Hence, DNP education for young people in such—closed cities is an important symbolic and pragmatic step within the broader initiative to realize a world free of nuclear weapons. Three years ago, the CIF made landmark progress by welcoming for the first time the participation of

Japanese high school students from the bombed cities of Hiroshima and Nagasaki. Since then, participating Japanese schools have included those from outside Hiroshima and Nagasaki as well, while from the U.S., participating schools have gathered from all over the country, including those from the states of California, Connecticut, and Wisconsin. Participation from Russia's closed nuclear cities also continues.

With the presentations by high school students from Hiroshima and Nagasaki being based on their cities' direct experience of a nuclear tragedy, they have brought a new perspective to the project. They have done so by bringing home the important message that understanding the real human impact caused by the use of nuclear weapons, as well as the long-term impact of such weapons on people and the environment, is itself the key to preventing the future use of nuclear weapons. The tragic memory of nuclear weapons in Hiroshima and Nagasaki must never be forgotten. Education can be a means of keeping that memory alive.

The 2002 UN Report that I mentioned above supports an approach informed by the philosophy of "teaching how to think, rather than what to think," and the CIF also represents a program that can foster critical thinking skills to that end. The study and research of matters related to disarmament and nonproliferation call for an academic approach and the integration of knowledge from a variety of perspectives. For this reason as well, the CIF takes an interdisciplinary approach for applying the various areas of science, society and culture, economics, and geopolitics. These areas make it possible for the CIF curriculum to incorporate various courses, attract students with broad interests and talents, and promote teamwork.

Once the conference is over, participating students set about

making presentations for classmates who were unable to participate directly in the meeting or for the student bodies of their schools, as well as, to the extent possible, their school's local community. Through this, the information dissemination and awareness-raising activities of participants find a wider audience. Moreover, project participants, by dint of having participated in this project, become more keenly interested in international problems, security, and issues related to disarmament and nonproliferation, and in the future, they can be expected to mature as personnel who go on to play an active role in this field.

While it may be difficult to decide on a clear career path as high school students, we are working in cooperation with all the teaching staff in charge to ensure that students remain conscious of issues relating to disarmament and nonproliferation, bearing in mind as well the encouragement of their growth as personnel whose major objective is to contribute actively to the realization of international peace.

Through this project, the CNS aims to contribute to international peace and security by providing the younger generation, which is to assume the responsibilities of working for world peace, with an opportunity to seriously reflect on peace issues such as nuclear nonproliferation, disarmament, and abolition. Generally speaking, it must be said that DNP education worldwide is still at an early stage of its development. Furthermore, I do not think that it is an exaggeration to say that DNP projects for high-school students are almost nonexistent. I would like to emphasize the importance of thinking about peace at a young age. Furthermore, it is essential for young people to acquire a practical way of thinking in order to accomplish a peaceful world in addition to grasping the concept of peace.

4. Challenges and Future Prospects

Having been involved in DNP education for young people, I always feel the need for more world leaders to keenly recognize that the inherent power and potential of education is the key for achieving the goal of building a safe and peaceful world that is free of nuclear weapons.

Approaching the end of his term in office, on May 27, 2016, President Obama gave a speech as the first sitting American president to visit Hiroshima. In this speech, he stated that "among those nations like my own that hold nuclear stockpiles, we must have the courage to escape the logic of fear and pursue a world without them. We may not realize this goal in my lifetime, but persistent effort can roll back the possibility of catastrophe. We can chart a course that leads to the destruction of these stockpiles."

In addition, in the historic speech he delivered in Prague in April 2009, shortly after his inauguration as president, while making an appeal for the necessity of a safe and peaceful world free of nuclear weapons, he declared that "this goal will not be reached quickly—perhaps not in my lifetime. It will take patience and persistence."

Certainly, in order to realize a world free of nuclear weapons, it is essential for the next generation to carry on our present efforts, and moreover, as our successors, they must exercise their critical thinking skills in an innovative and creative manner so as to accelerate this momentum. Such continuity must exist for generating a momentum toward nuclear disarmament. DNP education is itself the most important means to that end.

Considering the recent stalemate in nuclear disarmament, as well as the growing schism between nuclear weapon states and nonnuclear weapons states, it is perhaps no surprise that evaluations vary as to whether progress toward nuclear disarmament has moved forward, backward, or nowhere during President Obama's time in office. However, I believe that to have pushed the discussion of nuclear disarmament and abolition into the context of mainstream policy debates and inspired a strong sense of hope, in the civil society sector in particular, constitutes a magnificent achievement in itself.

President Obama's speech in Prague strengthened a sense of anticipation over the start of negotiations for a treaty on the prohibition of nuclear weapons (or nuclear weapons convention, NWC), and it is very interesting that the world's nuclear powers, including President Obama's own U.S., were backing the start of negotiations with regard to a treaty that they continued to oppose. In this sense, as well, while I wanted President Obama, in the remainder of his term in office, to emphasize as much as possible the importance of DNP education for youth, it is my hope that he makes it a part of his life's work now that he has stepped down as president.

Dr. William Perry, who was our special guest at the 2016 CIF Spring International Conference held in Monterey, stated, at the outset of his lecture, that in order to reduce the threat of nuclear weapons, unless young people, through education, came to understand the actual threat posed by nuclear weapons, it would be impossible to make further progress toward the abolition of nuclear weapons. In addition, when he delivered an important speech on nuclear disarmament at Monterey in 2013, the then UN Secretary-General Ban Ki-moon stressed the importance of disarmament education as follows:

"It is easier for students to learn the logic of nuclear deterrence

The importance of disarmament and nonproliferation education for the abolition of nuclear weapons 215 than to learn to discard the myths that keep nuclear weapons in place. But education can help to refute the claim that nuclear disarmament is utopian."

In other words, regardless of how difficult the current nuclear disarmament situation may seem, the next generation needs leaders who possess strong will to look this harsh reality squarely in the eye and work to change it. For this reason as well, rather than educating the future generation to accept the status quo, it is important to cultivate successors who exercise critical thinking skills and behaving in ways that are richly creative.

In addition, I believe that discussing the amoral character of nuclear weapons is also indispensable to DNP education that aims to realize the abolition of nuclear weapons. However, when it comes to morality, it is difficult to establish a constructive dialogue between strategic researchers who believe in nuclear deterrence and nuclear abolitionists who aim for a world without nuclear weapons. For that reason, many experts in nuclear disarmament and nonproliferation shy away from discussing nuclear issues from the perspective of morality. Nevertheless, when discussing the abolition of nuclear weapons, I worry that as long as we ignore their inherent inhumanity and amorality, achieving the actual abolition of nuclear weapons is impossible.

President Obama himself, in his Hiroshima speech, stated: "That is a future we can choose, a future in which Hiroshima and Nagasaki are known not as the dawn of atomic warfare but as the start of our own moral awakening." In his Prague speech as well, he stated that "as a nuclear power, as the only nuclear power to have used a nuclear weapon, the United States has a moral responsibility to act." This is a very important aspect, and I feel strongly that moral elements should

be further incorporated into disarmament education in the future.

In addition, in an address delivered on being honored with the Nobel Peace Prize, President Obama invoked the words of President Kennedy, saying "Let us focus on a more practical, more attainable peace, based not on a sudden revolution in human nature but on a gradual evolution in human institutions." At Hiroshima as well, he acknowledged that "We may not be able to eliminate man's capacity to do evil."

Certainly, it may be impossible to fundamentally eradicate the evil of humanity. However, the progress of nonproliferation and disarmament naturally calls for the necessary strengthening of international legislation governing these issues, as well as the implementation of the relevant domestic laws and regulations by national governments. Simultaneously, it is also important to expand networks of positive solidarity that aim and work toward social justice, world peace, and a safe and peaceful world free of nuclear weapons. For this purpose as well, I particularly emphasize the limitless potential of the role played by DNP education for youth.

*This translated version was revised on June 10, 2017.