UNODA OCCASIONAL PAPERS AINA No. 31. December 2017 DPS N AINARS STATEMENTS SYMPOSIA WORKSHOPS

SME

CELEBRATING 15 YEARS OF DISARMAMENT

DPS MEETINGS PRESENTATIONS PAPERS SEMII

AINARS STATEMENTS SYMPOSIA WORKSHOPS

AND NON-PROLIFERATION EDUCATION

DPS MEETINGS PRESENTATIONS PAPERS SEMII

AINARS STATEMENTS SYMPOSIA WORKSHOPS

DPS MEETINGS PRESENTATIONS PAPERS SEMII AINARS STATEMENTUNODAPOSIA WORKSHOPS

DPS MEETINGS PRESENTATIONS PAPERS SEMII

AINARS STATEMENTS SYMPOSIA WORKSHOPS

DPS MEETINGS PRESENTATIONS PAPERS SEMII AINARS STATEMENTS POSIA WORKSHOPS

OPS MEETINGS PRESENTATIONS PAPERS SEMII AINARS STATEMENTS SYMPOSIA WORKSHOPS



UNODA OCCASIONAL PAPERS

No. 31, December 2017

CELEBRATING 15 YEARS OF DISARMAMENT AND NON-PROLIFERATION EDUCATION



The United Nations Office for Disarmament Affairs (UNODA) Occasional Papers are a series of ad hoc publications featuring, in edited form, papers or statements made at meetings, symposiums, seminars, workshops or lectures that deal with topical issues in the field of arms limitation, disarmament and international security. They are intended primarily for those concerned with these matters in Government, civil society and in the academic community.

The views expressed in this publication are those of the authors and do not necessarily reflect those of the United Nations or its Member States.

Material in UNODA Occasional Papers may be reprinted without permission, provided the credit line reads "Reprinted from UNODA Occasional Papers" and specifies the number of the Occasional Paper concerned. Notification to the following e-mail address would be highly appreciated: unoda-web@un.org.

Symbols of United Nations documents are composed of capital letters combined with figures. These documents are available in the official languages of the United Nations at http://ods.un.org. Specific disarmament-related documents can also be accessed through the disarmament reference collection at https://www.un.org/disarmament/publications/library/.

This publication is available from

www.un.org/disarmament

UNITED NATIONS PUBLICATION Sales No. E.18.IX.4

ISBN 978-92-1-142237-5 eISBN 978-92-1-363123-2

Copyright © United Nations, 2017 All rights reserved Printed at the United Nations, New York

Contents

Foreword	
Jan Eliasson	V
Preface	. vii
Education: A weapon for peace—The case of the nuclear ban treaty Céline Nahory	1
Disarmament education in action Kate Dewes	. 13
For sustainable nuclear disarmament: Engaging and empowering youth through disarmament education Anna Ikeda and Peter Mburu	. 25
Bringing disarmament and non-proliferation education to young generations: Case study of high school students <i>Masako Toki</i>	. 35
Revisiting disarmament and non-proliferation education William C. Potter	. 47
Related to the lives and concerns of the learners: Revitalizing undergraduate disarmament education through Model UN simulations and service learning Matthew Bolton	. 59
The future of disarmament and non-proliferation education: Aiming for continuity or a new direction? Péricles Gasparini and Juliette Kohler	. 71
Recommendations of the 2002 United Nations Study on Disarmament and Non-Proliferation Education: Where we stand now and where we should go further, including ideas for the next 10 years	
Adlan R. Margoev and Vladimir A. Orlov	. 83

Foreword

In 2002, the United Nations Secretary-General, with the assistance of a Group of Governmental Experts, presented a very successful report to the General Assembly on disarmament and non-proliferation education with concrete recommendations for action.

Fifteen years on, we continue to live in challenging times in terms of disarmament and non-proliferation: nuclear weapons continue to be developed; the taboo against the use of chemical weapons is being undermined; small arms continue to fuel conflict. Weapon use also continues to exacerbate terrorism, organized crime and the abuse of human rights.

At the centre of it all is the fact that the continued use and proliferation of weapons threaten the innocent, hinder development, keep people from prospering and may have an adverse impact on countries trying to reach the 2030 Sustainable Development Goals.

Disarmament and non-proliferation education is about raising awareness of the need to attain the ultimate goal of general and complete disarmament. But, more than that, it offers an opportunity for deeper analysis of conflict and conflict resolution, the causes of war and the interaction between technology and warfare, emphasizing approaches to reducing and eliminating violent conflicts of all kinds.

Therefore, today, the need for disarmament and non-proliferation education is more important than ever. We need to renew our efforts to inform and empower citizens, particularly young people, to work with their Governments for positive change.

To achieve this, the international community needs to make a concerted effort to reach out to teachers, parents, schools, social groups and local communities. Luckily, thanks to the exponential growth in technology, including the Internet and social media, the resources at our disposal are almost endless for bringing together ideas, concepts and people from every walk of life.

This Occasional Paper can provide inspiration to this end. The contributions from experts from around the world showcase fresh perspectives, new ideas and innovations in disarmament and non-proliferation education, which I hope will mobilize readers into action.

Wherever I go, I carry a copy of the United Nations Charter with me. This helps me keep at the forefront of my mind the larger goal of striving for peace throughout the world.

Let's together spread the word on the need for disarmament and non-proliferation.

Let's educate for peace.

Jan Eliasson

Chairman of the Stockholm International Peace Research Institute Governing Board and Former Deputy Secretary-General of the United Nations

Preface

The United Nations Office for Disarmament Affairs publishes this edition of the Occasional Papers to celebrate the fifteenth anniversary of the United Nations Study on Disarmament and Non-Proliferation Education (A/57/124), which was presented to the United Nations General Assembly in 2002. Experts from a variety of disciplines were invited to contribute their thoughts and ideas on current perspectives, as well as innovative approaches on disarmament and non-proliferation education.

This Occasional Paper begins with contributions on the role disarmament and non-proliferation education played in the events leading up to the successful adoption of the Treaty on the Prohibition of Nuclear Weapons on 7 July 2017. It continues with essays on disarmament and non-proliferation education aimed at youth and high school students, and then moves on to analyses of the topic at the tertiary-education level. The Paper concludes with essays by experts that contain new and actionable ideas on how to take disarmament and non-proliferation education forward now and in the future.

Education: A weapon for peace The case of the nuclear ban treaty

Céline Nahory

Education is an empowering force—a force that creates knowledge, builds confidence, breaks down barriers and creates opportunities never thought possible before. This is the vision Peace Boat has followed over its more than 30 years of activities promoting education for peace, disarmament and sustainability. It is also the model that drove the humanitarian disarmament process that led to the adoption, on 7 July 2017, of the Treaty on the Prohibition of Nuclear Weapons (TPNW).

Seventy-two years after the atomic bombs were dropped on Hiroshima and Nagasaki, a significant majority of the world's Governments adopted a new treaty banning the only weapons of mass destruction yet to be prohibited—nuclear weapons. The Treaty places nuclear weapons in the same category under international law as the other major kinds of indiscriminate and

ABOUT THE AUTHOR: Céline Nahory represents Peace Boat in the International Steering Group of the International Campaign to Abolish Nuclear Weapons and coordinates the Global Article 9 Campaign. She also sits in the International Council of the International Peace Bureau and serves as an advisor to URBZ.

¹ The Treaty text and adherence status are available from http://disarmament.un.org/treaties/t/tpnw.

inhumane weapons—biological and chemical weapons, antipersonnel landmines and cluster munitions.

In a first for a treaty pertaining to nuclear weapons, the TPNW focuses on international human rights and humanitarian law, framing nuclear weapons in terms of the threat they pose to humanity rather than terms driven by military doctrines and power politics. This change of paradigm is the result of the Humanitarian Initiative that drove the process. Education about the impact of nuclear weapons enabled civil society and a majority of the world's Governments to reclaim the international agenda to prohibit and stigmatize nuclear weapons.

The Humanitarian Initiative to prohibit nuclear weapons

The TPNW is a groundbreaking, progressive treaty in many ways, not only insofar as it unequivocally and categorically prohibits, under any circumstances, any activities related to nuclear weapons—their development, testing, production, manufacture, possession, transfer, use or threat of use, or any form of assistance to these activities. It is also remarkable in terms of the process that led to its adoption, known as the Humanitarian Initiative. This grew out of deep concern over the catastrophic humanitarian consequences that would occur if they ever were used.

In 1945, immediately after the first nuclear bombs were dropped on Hiroshima and Nagasaki, the International Committee of the Red Cross—appalled by the unspeakable destruction, death and suffering they generated—started calling on the world to ensure that nuclear weapons were never used again. A year later, the first resolution of the newly created United Nations General Assembly established a commission charged to make proposals for "the elimination from national armaments of atomic weapons and of all other major weapons

adaptable to mass destruction".² Yet, despite decades of rhetoric in favour of a nuclear-weapon-free world, the nine nuclear-weapon States together still possess around 15,000 nuclear weapons and have failed to develop any detailed plans to eliminate their arsenals.

Humanitarian concerns have long driven the regulation of war and weapons through international humanitarian law, as well as disarmament initiatives—as seen with biological and chemical weapons, landmines, cluster munitions, small arms and light weapons. The Humanitarian Initiative on nuclear weapons took over seven decades to gain traction. Long promoted by civil society, it started gaining momentum in 2010, with the recognition in the outcome document of the review conference of the Treaty on the Non-Proliferation of Nuclear Weapons of the "catastrophic humanitarian consequences of any use of nuclear weapons". Three intergovernmental conferences on the humanitarian consequences of nuclear weapons were held, in Oslo in 2013, and in Navarit and Vienna in 2014. These led to the conclusion that nuclear weapons pose a threat to the whole of humanity and there can be no legal, ethical or moral justification for their possession, use or threat of use. In December 2016, the United Nations General Assembly mandated⁴ a conference "to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination", which resulted in the adoption on 7 July 2017 of the TPNW, with the support of 122 States.

² See General Assembly resolution 1 (I).

³ See 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. I (NPT/CONF.2010/50 (Vol. I)).

⁴ United Nations General Assembly resolution 71/258.

How did we get here? The Humanitarian Initiative as an education process

From its outset, the Humanitarian Initiative has sought to shift the terms of the nuclear disarmament debate from the security dimension that a minority of States attributes to these weapons, to their humanitarian and environmental impact, the risk they pose and thus their lack of conformity to international humanitarian, human rights and environmental law.

To do so, a large-scale education process was set in motion. Inspired by earlier disarmament processes, notably on landmines and cluster munitions, civil society in general and in particular the International Campaign to Abolish Nuclear Weapons (ICAN), with its membership of over 400 organizations in 100 countries, played a significant role. Working with experts, practitioners and communities directly affected by nuclear weapons, civil society gathered—whether deliberately, by accident or by negligence—new knowledge on the actual risks of nuclear detonation. Such efforts revealed that no State or international body would be able to address the immediate humanitarian emergency that would result from any nuclear weapon use nor its long-term consequences. Furthermore, civil society highlighted the global impact of the use of nuclear weapons on climate, health, the environment and food security for current and future generations.⁵

The Humanitarian Initiative also built bridges between different constituencies. Indeed, the large education process around the risks and consequences of nuclear weapons made clear that these weapons were not merely an issue of the past, but very much one of the present and of the future, and one which affects humanity as a whole. As a direct result, it created a movement that not only brought together disarmament activists,

See, for example, *Unspeakable Suffering*, Reaching Critical Will (January 2013); *Catastrophic Humanitarian Harm*, ICAN (August 2015). Available from http://www.icanw.org/resources/publications/.

but also galvanized the commitment and activism of youth, women, religious leaders, aid workers, doctors, scientists, trade unions, members of parliament, city officials and more.

In this process, the voices of victims and survivors of the atomic bombs in Hiroshima and Nagasaki (known as hibakusha), as well as those of nuclear testing from Australia, the Marshall Islands, French Polynesia, the United States and others, played a crucial role. Indeed, hearing their first-hand accounts of the horror they experienced, of the lasting legacy of nuclear weapons and of the physical and psychological suffering they have faced ever since, has been an eye-opening experience that served as a foundation for the process itself.

Peace Boat Hibakusha Project

Well aware of the transformative power of hearing directly from hibakusha and convinced that their voices should be at the centre of the Humanitarian Initiative to ban nuclear weapons, Peace Boat launched the "Global Voyages for a Nuclear-Free World: Peace Boat Hibakusha Project" in 2008. The project consists of inviting hibakusha of Hiroshima and Nagasaki to join around-the-world voyages and to share their tragic experiences. In so doing, the initiative educates people about the devastating humanitarian impact of nuclear weapons, engages policymakers and catalyses public support to prohibit nuclear weapons as a step towards the abolition of such weapons. As part of these efforts, Peace Boat cooperates with international groups and networks, including ICAN, Hibakusha Stories and Mayors for Peace.

To date, 10 such voyages have taken place, with the participation of over 170 hibakusha in the project. Through these voyages, hibakusha have visited over 20 cities, where they held public testimony sessions and met with high-level officials in foreign ministries, parliaments and city halls. In the months leading to the negotiation conference, Peace Boat made a special effort to organize such high-level meetings with

officials in countries that were not supportive of the ban, including Belgium, Finland, Greece, Italy, the Netherlands, Norway, Spain, Sweden and the United Kingdom. Looking straight into the officials' eyes, hibakusha told their stories and urged them to convince their Governments to participate in the negotiations and support the TPNW. As a result, some city councils and regional assemblies adopted resolutions calling on their central government to do more on the ban.⁶ Hibakusha also held press conferences, participated in cultural and educational programmes, and met with other victims and survivors of war and weapons, including survivors of nuclear testing.

Breaking down barriers

By sharing their experiences, hibakusha, who are now on average over 80 years old, have sought to convince the world of the urgency of abolishing nuclear weapons to prevent anyone else from ever experiencing the inhumanity of these weapons. Their voices have put a human face to the facts and evidence about the impact of nuclear weapons. Their voices have moved people, including those in official positions, at a personal level. And by bringing the question of nuclear weapons to a reality people can relate to, the hibakusha's voices have significantly contributed to shifting the nuclear disarmament discourse, hitherto confined to technical and strategic considerations reserved for experts, into something everyone can get involved in.

As a result, the Humanitarian Initiative opened a space for civil society to mobilize and act at the community, national,

⁶ For example, the Regional Parliament of Valencia (Les Corts) unanimously passed a motion urging the Spanish Government to stance itself in favour of the current United Nations negotiations and support the nuclear ban treaty. It can also be said that the meetings held between hibakusha and Dutch Foreign Minister Bert Koenders and parliamentarians contributed to the Netherlands' participation in the negotiations.

regional and global levels. In the course of a few years, the debate on nuclear weapons became one no longer perceived as an issue of the cold war, but a matter that had to be addressed urgently. Recognizing the crucial expertise and mobilizing power civil society can offer, non-governmental organizations became a driving force in carrying forward a diplomatic process—one that channelled cooperation among civil society, the International Committee of the Red Cross, United Nations agencies and Governments.

Knowledge is power

Educating the world about the actual risks and impact of any nuclear detonation not only succeeded in changing the nuclear disarmament narrative. It also led to a paradigm shift, which revitalized multilateralism after decades of stalled efforts in United Nations disarmament forums, where nuclear-weapon States have dominated the nuclear disarmament debate and blocked any attempts to significantly move forward.

"Democracy has come to nuclear disarmament", said Ambassador Juan Carlos Mendoza of Costa Rica. Indeed, the descriptions and indisputable evidence presented as part of the Humanitarian Initiative created a sense of shared responsibility among a majority of States and led them to become full-fledged stakeholders in nuclear disarmament. As Ambassador Alexander Kmentt of Austria put it, "We have witnessed a clear shifting of the parameters, the focus, the tone and the balance of the discussion and the engagement of all countries of the treaty on nuclear weapons. Non-nuclear-weapon States are today

⁷ Statement delivered by Ambassador Juan Carlos Mendoza of Costa Rica at the 2015 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) (29 April 2015). Available from http://www.un.org/en/conf/npt/2015/statements/pdf/CR en.pdf.

more empowered to demand their security concerns be taken in consideration on an equal basis."8

The Humanitarian Initiative opened a space Governments could claim to take action. A number of non-nuclear-weapon countries, under the leadership of a core group of States, notably Austria, Brazil, Indonesia, Mexico, Nigeria, South Africa and Thailand, were determined to pursue the imperative of human security for all and decided to reclaim the global security agenda. And so, the plan to develop a nuclear ban treaty was set in motion

The *Washington Post* described the process as an "uprising" by a majority of nations.⁹ This may be dramatic terminology, but the initiative nonetheless represented a bold and unprecedented move to shake the status quo imposed by nuclear powers.

Education as a political tool

As significant the adoption of the TPNW is, it is "just the beginning", as Ambassador Thomas Hajnoczi of Austria rightly stated.¹⁰ The Treaty opened for signature on 20 September 2017, when Heads of State and Government met in New York for the

⁸ Closing statement delivered by Ambassador Alexander Kmentt of Austria at the 2015 NPT Review Conference (May 22, 2015). Available from http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ npt/revcon2015/statements/22May Austria.pdf.

⁹ Dan Zach, "UN Nuclear Conference Collapses Over WMD-free Zone in the Middle East", Washington Post (May 22, 2015). Available from https://www.washingtonpost.com/world/national-security/unnuclear-conference-collapses-over-wmd-free-zone-in-the-middle-east/2015/05/22/8c568380-fe39-11e4-8c77-bf274685e1df_story. html?utm term=.297968aa3fcf.

Ambassador Thomas Hajnoczi, Permanent Representative of Austria to the United Nations in Geneva, tweet, 7 July 2017: "Adoption of "nuclearban treaty just beginning. We prepare 4 signature, ratification & early entry into force. "Austria 4 universalization". Available from https://twitter.com/ThomasHajnoczi/status/883352704894070784.

United Nations General Assembly's opening session. By the end of 2017, 56 nations had already signed it and 3 had ratified it. The Treaty will enter into force once 50 countries have signed and ratified it. Yet, the ultimate goal is to realize universal adherence to the Treaty in order to achieve a nuclear-weaponfree world.

Of course, although the Treaty provides a pathway for States possessing nuclear weapons to join, it is not expected that they will join anytime soon. In fact, France, the United Kingdom and the United States have made clear that they will not, 11 and they are putting pressure on other Governments not to join either. In that sense, the very existence of the TPNW is already having an impact. Otherwise, how can the active opposition of nuclear-weapon States be explained?

The Treaty builds a new international legal norm. Based on experiences with other weapons, it is clear that prohibition and stigmatization have always preceded abolition. It is also proven that weapon-prohibition treaties lead to concrete changes in policies and behaviours, including in States that are not party to these treaties. To strengthen this norm, it is important that a large number of countries sign and ratify the TPNW at the earliest.

In this new phase, civil society—both in non-nuclearand nuclear-weapon States—has an important role to play in educating the global public about this new norm; in getting Governments to support, sign and ratify the Treaty; and in ensuring that it is enforced.

Much of the groundwork and methods are already in place. Over the years, civil society has acquired extensive experience in educating and mobilizing the public. In addition to continuing to raise awareness about the dangers of nuclear weapons, efforts

[&]quot;Joint Press Statement from the Permanent Representatives to the United Nations of the United States, United Kingdom, and France Following the Adoption of a Treaty Banning Nuclear Weapons", 7 July 2017. Available from https://usun.state.gov/remarks/7892.

must be directed at informing the public of the existence of the new treaty and encouraging citizens to demand that their Governments come on board.

The TPNW does recognize the importance of peace and disarmament education in all its aspects as a way to create change. It is now time to also step up our efforts to make it happen; in the countries that sign the Treaty, there will be a need to ensure that it is implemented. In some cases, it will require developing national legislation and will open up the possibility to elaborate additional measures that build on the Treaty. In countries hosting United States nuclear weapons on their soil or relying on them for their security, the presence of nuclear weapons on their territories needs to be stigmatized, behaviours that go against the norm of the Treaty need to be denounced and, more generally, the call to disengage from such policies needs to be made more insistent. The TPNW has created avenues for the citizens of these countries, often overwhelmingly anti-nuclear, to question their Government's policies and demand change.

"The beginning of the end of nuclear weapons"

A few years ago, when civil society, including Peace Boat and ICAN, started calling for a treaty prohibiting nuclear weapons as a step towards their elimination, many perceived the demand as naïve and unrealistic. Today the world has a strong treaty, supported by a large majority of the world's Governments and citizens.

Education paved the way for the global moral, ethical and political consensus that the nuclear ban treaty epitomizes. In addition to being illegitimate and immoral, the new treaty now makes nuclear weapons illegal. It will, over time, make retaining such weapons or even defending their very existence increasingly difficult.

"This is the beginning of the end of nuclear weapons", rejoiced Setsuko Thurlow, a hibakusha from Hiroshima. 12 Yet, the road ahead towards abolition is long. We now have the responsibility to carry on the hibakusha's struggle, and to redouble efforts in raising awareness about the new treaty, its principles and norms in order to ensure universal treaty adherence and the elimination of nuclear weapons. We owe it to hibakusha to pass on their legacy and to ensure that there will be no more Hiroshima, no more Nagasaki, no more hibakusha.

Setsuko Thurlow, closing statement at the Conference to Prohibit Nuclear Weapons. Available from https://www.facebook.com/icanw.org/ videos/1911146518902258/.

Disarmament education in action

Kate Dewes

Fifteen years since the unanimous welcoming by the United Nations General Assembly of the United Nations Study on Disarmament and Non-Proliferation Education (A/57/124), how do we as an international community sustain its vision and exploit opportunities for further nuclear and other disarmament?

The Study's first recommendation calls for Member States to use, designate or establish public advisory bodies whose responsibilities include advising on disarmament education and training. In 1986, during the United Nations International Year of Peace, various New Zealand peace groups petitioned their Government to invest at least one day's military spending into teaching about peace and disarmament. The following year, as part of New Zealand's iconic Nuclear Free Zone, Disarmament and Arms Control Act, a Minister for Disarmament was appointed along with an eight-person Public Advisory Committee on Disarmament and Arms Control to advise the Government on foreign affairs and disarmament issues, and act as the trustees for a Peace and Disarmament Education

ABOUT THE AUTHOR: Kate Dewes was a member of the United Nations Secretary-General's Advisory Board on Disarmament Matters from 2008 to 2012.

Available from http://www.legislation.govt.nz/act/public/1987/0086/latest/ DLM115116.html.

Trust. Although the Trust money was not sourced from diverted military expenditure, the petition built the political support for the establishment of the Trust, which finances post-graduate scholarships, speaking tours by disarmament experts, conferences, exhibitions and other creative local community projects.

The Trust also funded me to help mentor two younger delegates while attending the recent General Assembly negotiations for the Treaty on the Prohibition of Nuclear Weapons (TPNW). As the New Zealand member of the Group of Governmental Experts that prepared the United Nations Study, I was delighted to witness disarmament education in all its aspects in action, as civil society participants and diplomats from many States parties to regional or single-State nuclear free zones worked in close partnership to draft, negotiate and finally adopt the Treaty² on 7 July 2017.

The TPNW preamble recognizes the importance of both peace and disarmament education, and also recognizes the importance of "raising awareness of the risks and consequences of nuclear weapons for current and future generations" and disseminating "the principles and norms of this Treaty". It also stresses "the role of public conscience in the furthering of the principles of humanity as evidenced by the call for the total elimination of nuclear weapons". The TPNW acknowledges the contributions from the United Nations, the International Red Cross and Red Crescent Movement and other international, regional, non-governmental organizations (NGOs), religious leaders, parliamentarians, academics and the hibakusha—survivors of the Hiroshima and Nagasaki atomic bombings and subsequent nuclear testing.³

² The Treaty text and adherence status are available from http://disarmament.un.org/treaties/t/tpnw.

³ Hibakusha is a term that originally refers to the survivors of the Hiroshima and Nagasaki nuclear bombings, but has been extended here to include all victims of nuclear testing.

Signatory States also committed to support and strengthen "the effective participation of women in nuclear disarmament". The conference modelled this by appointing a female Chair—the Permanent Representative of Costa Rica to the United Nations Office at Geneva, Ambassador Elayne Whyte Gómez—from a country with no military forces. There were some all-women delegations, such as New Zealand's, while about 20 per cent were led by women ambassadors calling strongly for complete nuclear disarmament. Women were also well-represented in NGO delegations, reflecting the particularly strong interest in this issue among women.

Article 5 of the TPNW calls for States to "adopt the necessary measures to implement its obligations under this Treaty" and "take all appropriate legal, administrative and other measures, including the imposition of penal sanctions to prevent and suppress any activity prohibited to a State Party under this Treaty undertaken by persons or on territory under its jurisdiction or control". New Zealand's nuclear-free legislation, which has withstood 30 years of pressure from its former nuclear allies to modify or abolish it, is a model that could be adopted by States. It would give States an opportunity to establish similar public advisory committees, appoint a Minister for Disarmament and create a trust fund to implement further disarmament education priorities.

These successful negotiations have energized the Governments of participating States, and given anti-nuclear NGOs worldwide an opportunity to redouble their disarmament education efforts to generate growing support for the TPNW. During the negotiations, representatives of indigenous peoples, parliamentarians, mayors, lawyers, doctors, academics, youth and hibakusha addressed the conference.

Participants, especially young people, constantly used social media to educate the wider public about the proceedings, reaching millions via tweets, blogs, videos and photos on Snapchat, WhatsApp and Facebook. Interviewing delegates and

hibakusha, they posted their perspectives on various websites and YouTube. They hosted webinars and organized Skype interviews between diplomats and schoolchildren back in their home countries. Photos from the Women's March to Ban the Bomb, held in torrential rain, and creative street theatre—for example, using masks of world leaders from the nine nuclear-weapon States—enlivened these bulletins and helped attract media attention.

The *Nuclear Ban* newsletter, which Reaching Critical Will⁴ published online and in hard copy for delegates and emailed to an international mailing list for those who could not attend the meeting, summarized each day's proceedings and contained analyses and articles about key issues. The presence of representatives of many international and national organizations helped support the diplomats and provided an accountability mechanism for States. The International Campaign to Abolish Nuclear Weapons⁵ website is the main repository for information about the TPNW, where citizens can access material to educate their elected representatives and diplomats on the issues.

Throughout the three weeks of negotiations, educational events, with panel presentations by delegates and civil society, on a wide range of issues were held on the margins of the meetings. Topics covered included nuclear deterrence, mobilizing parliamentarians to get States to sign and implement the TPNW, financing the nuclear industry, hosting nuclear weapons belonging to other nuclear States, lessons from the Chemical and Biological Weapons Conventions, and the effects of nuclear winter and famine. Two interactive sessions used role playing to help participants confidently respond to common pronuclear weapon arguments, involving an eclectic panel of nuns, youth, academics and a former operator of nuclear weapons brainstorming creative answers to practice together.

⁴ See http://www.reachingcriticalwill.org/.

⁵ See http://www.icanw.org/.

Disarmament education happened as delegates debated, for example, whether the transit of potentially nuclear-armed warships is banned in any of the nuclear-free zones; defining "threat of use"; and what constitutes humanitarian and environmental law. The 1996 International Court of Justice's Advisory Opinion⁶ on the legality of the threat or use of nuclear weapons was frequently referred to; and victims of nuclear-weapon tests called for medical and other support, as well as for environmental remediation of their lands. Mayors for Peace and Japanese hibakusha delivered over 3 million petition signatures to the Chair in support of the TPNW.

Recommendation 8 of the United Nations Study calls for parliamentarians and/or non-government advisers to be included in delegations to United Nations disarmament-related meetings. Over the past decade, United Nations disarmament meetings have become more accessible and inclusive by allowing more civil society participation as observers, and as presenters on panels. Therefore, for the TPNW negotiations, there was not the same need to appoint advisers formally to government delegations; instead, in New Zealand's case, the three NGO delegates participated freely in support of their government delegation. Also, this enabled some politicians and mayors from nuclear-weapon States and their allies who had boycotted the negotiations, such as the United Kingdom, Japan and Australia, to voice their opinions via the NGO presentations.

This process parallels earlier civil society leadership in educating political leaders and generating political will to expedite negotiations to outlaw anti-personnel landmines and cluster munitions. For example, in New Zealand a strong NGO campaign convinced the Government to host the final negotiating round, which achieved the Convention on Cluster Munitions.

⁶ Available from http://www.un.org/law/icjsum/9623.htm.

Politicians also play a vital role in ensuring all disarmament and arms control treaties, including the TPNW, are codified in national legislation. Citizen groups with the appropriate knowledge will now need to engage directly with their own political representatives to encourage them to act. The 800-strong group Parliamentarians for Nuclear Non-proliferation and Disarmament⁷ provides helpful resources, such as the Handbook Supporting Nuclear Non-Proliferation and Disarmament⁸ and a Parliamentary Action Plan for a Nuclear Weapon Free World, 9 co-published by the Inter-Parliamentary Union 10 for its 173 members.

Some useful actions by parliamentarians are the following:

- Resolutions, motions and legislation adopted by parliament
- Questions, hearings and debates in parliament
- Parliamentary commemorations of key dates
- Hearings, debates, panel discussions and resolutions in interparliamentary bodies, including the Inter-Parliamentary Union and the parliamentary assemblies of the North Atlantic Treaty Organization, the Organization for Security and Cooperation in Europe and the Commonwealth of Independent States
- Joint letters/statements with parliamentary colleagues globally or regionally
- Joint events with civil society constituencies
- Social media actions and promotion¹¹

⁷ See http://www.pnnd.org/.

⁸ Available from http://www.pnnd.org/ipupnnd-handbook-supporting-nuclear-non-proliferation-and-disarmament.

⁹ Available from http://www.pnnd.org/sites/default/files/i/doc/2017ActionPlan/ parliamentary_action_plan_for_a_nuclear-weapon-free_world_with_ appendices.pdf.

¹⁰ See http://www.ipu.org/english/home.htm.

¹¹ See http://www.pnnd.org/sites/default/files/i/doc/2017ActionPlan/parliamentary_ action plan for a nuclear-weapon-free world with appendices.pdf.

In New Zealand, citizen groups have worked closely with Members of Parliament over decades to influence policies on disarmament and non-proliferation and to keep the Government accountable. Among other things, the Public Advisory Committee on Disarmament and Arms Control played a key role in scrutinizing the Government's voting on United Nations disarmament resolutions, advising the Government to vote in support of those critical of deterrence, even if it meant being further ostracized by Western allies.¹² The Committee also advised the Government to support the initiative to have the International Court of Justice give an advisory opinion on the legality of the threat or use of nuclear weapons, and play a constructive role in the New Agenda Coalition¹³ on nuclear disarmament

One lesson learned early on was the need to compliment parliamentarians when they act constructively, like taking a leadership role in Convention on Cluster Munitions negotiations or passing a resolution calling on the Government to work with other nations to support the former United Nations Secretary General's Five-Point Proposal¹⁴ for nuclear disarmament. They respond positively to getting a bunch of flowers, or a card thanking them for their efforts. In another example, Members of Parliament were given "nuclear-free" T-shirts and badges to wear while debating a resolution (passed unanimously) in Parliament to mark the twentieth anniversary of the nuclear-free legislation. This photo shows some cross-party Members of Parliament, including the Minister of Defence, celebrating on the steps of parliament after the debate.

¹² See Dewes, Kate, Peace and Disarmament Activism in Foreign Policy. Available from http://www.disarmsecure.org/Peace%20and%20 Disarmament%20Activism%20and%20Foreign%20Policy%20%202008.pdf.

¹³ Available from http://www.ccnr.org/8_nation_declaration.html.

¹⁴ Available from https://www.un.org/disarmament/wmd/nuclear/sg5point/.



On the issue of financing weapons development, there have been some positive examples of parliaments using their power to effect change. For example, the Belgian Government adopted landmines and cluster munitions divestment legislation before negotiations on the Mine Ban Convention and Convention on Cluster Munitions had even started. Nuclear-weapon divestment has also been pursued by the Norwegian, New Zealand and Swiss parliaments. In 2004, Norway produced ethical guidelines for their Government Pension Fund to ensure that the fund did not make investments that might contribute to unethical acts. This included divestment from companies involved in "the development and production of key components for nuclear weapons". Inspired by this, the New Zealand Government Superannuation Fund also divested from companies involved in producing nuclear weapons. Similarly, Switzerland legislators revised the Swiss Federal Act on War Material in 2012 to prohibit the financing of nuclear-weapon manufacturers. 15

¹⁵ See http://www.pnnd.org/sites/default/files/i/doc/Articles/pnnd-handbook-nuclear-spending-english_v04.pdf.

United Nations Study Recommendation 10 encourages municipal leaders, working with citizen groups, "to establish peace cities, as part of the Cities for Peace network of the United Nations Educational, Scientific and Cultural Organization. through, for example, the creation of peace museums, peace parks, websites, and production of booklets on peacemakers and peacemaking". In New Zealand, the Government established the Disarmament Education United Nations Implementation Fund to support local civil society groups to establish grassroots educational opportunities, especially for young people. There are now three Peace Cities in New Zealand. The first one, Christchurch, has hosted five peace and disarmament exhibitions featuring Hiroshima and Nagasaki, Gandhi, and the twentieth, twenty-fifth and thirtieth anniversaries of the nuclearfree policy. A Peace Walk was organized around significant places, such as the World Peace Bell; the City Council hosts a Peace City website; and the City presented Peace Awards to nine individuals and groups.

Each vear New Zealand schools hold a Schools Peace Week, 16 focusing on peace and disarmament activities from 5 to 12 August, to commemorate the atomic bomb victims of Hiroshima and Nagasaki in 1945. This year marked the thirtieth anniversary of the nuclear-free legislation and coincided with the negotiations for the TPNW. One hundred and thirty-five schools from across New Zealand, as well as from Australia, Burkina Faso, Burundi, Germany, India, Kazakhstan and Kenya, participated. A dedicated website¹⁷ hosted daily blogs from the United Nations during the negotiations of the TPNW, as well as resources for teachers and students, such as films, interviews, music, weblinks and ideas for actions for both primary and secondary students. Young children made lanterns, designed peace symbols and planted sunflowers. Older students watched films, held United Nations debates and role-played

¹⁶ See https://www.facebook.com/SchoolsPeaceWeek/.

¹⁷ Available fromhttp://www.nuclearfreenz30.org.nz/.

nuclear crises. In the wider community, some artistic mothers gathered stones from local beaches and painted "grateful rocks" for their preschool children to make into a peace sign. These colourful and creative actions often succeeded in getting the interest of local journalists, resulting in a front page story¹⁸ and national TV coverage. A Facebook page ensured that this nuclear-free rock idea went global within a few days. Similar images began appearing on beaches. The rocks were hidden in local playgrounds and libraries for kids to find and hold for a few days and then pass the message on.



This year, the international community marked the beginning of the review cycle leading up to the fiftieth anniversary of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 2020, and the adoption and signing of the TPNW. There are other opportunities each year for communities to highlight peace and disarmament education, including the following occasions: 29 August (International Day against Nuclear Tests); 21 September (International Day of Peace);

¹⁸ Available from http://www.nuclearfreenz30.org.nz/blog/ban-treaty/actions-peace-timaru-new-zealand/.

26 September (International Day for the Total Elimination of Nuclear Weapons); 2 October (International Day of Non-Violence); 24 October (United Nations Day); and 6 November (International Day for Preventing the Exploitation of the Environment in War and Armed Conflict).

There are also some upcoming events when the United Nations community can distribute copies of the United Nations Study to participants and encourage them to implement the recommendations. These include the United Nations Highlevel Conference on Nuclear Disarmament¹⁹ in 2018, all future TPNW and NPT Review Conferences, and the proposed fourth special session of the United Nations General Assembly on disarmament.²⁰

In conclusion, these examples of disarmament education in action show that the lead taken by the United Nations in commissioning the Study and the work undertaken by the 10 experts have borne fruit. It is up to all United Nations Member States and civil society worldwide to be alert to future opportunities to build upon these achievements.

¹⁹ See http://www.unfoldzero.org/un-to-hold-high-level-conference-onnuclear-disarmament/.

²⁰ See https://s3.amazonaws.com/unoda-web/wp-content/uploads/2017/06/ Statement-by-High-Representative-Izumi-Nakamitsu-on-the-outcome-ofthe-final-session-of-the-open-ended-working-group-on-a-fourth-Special-Session-of-the-General-Assembly-devoted-to-disarmament.pdf.

For sustainable nuclear disarmament: Engaging and empowering youth through disarmament education

Anna Ikeda and Peter Mburu

Amplify is a global network of young people working for nuclear abolition. The Amplify network is uniting young people from all over the world to create opportunities for future collaborations transcending strategic differences. Many of us Amplify members have our own affiliations with various groups working for the cause of nuclear abolition or other related issues. Our common goal is to amplify and strengthen the call for complete nuclear abolition by taking action, raising our voices and pursuing nuclear abolition in our communities and countries. We believe that it is a valuable contribution young people can make in the field of disarmament, where stakeholders are many and, at times, diverging interests seem to overshadow the common goal of a peaceful world.

As a youth network, we place significant importance on the role of disarmament education. In 2002, the United Nations Secretary-General released the United Nations Study on Disarmament and Non-Proliferation Education (A/57/124),

ABOUT THE AUTHORS: Anna Ikeda and Peter Mburu are from Amplify Youth Network—Generation of Change.

whose findings highlight the importance of empowering young individuals to contribute to achieving disarmament and non-proliferation measures and, ultimately, complete disarmament under effective international control. According to the United Nations report, the need for more youth involvement in disarmament and non-proliferation negotiations has never been greater, as "changing concepts and perceptions of security and threat magnify the urgency for new thinking to pursue disarmament and non-proliferation goals". We therefore welcome this opportunity to contribute to the United Nations Office for Disarmament Affairs Occasional Papers series, particularly at this critical time in history.

Background

Amplify was derived from the International Youth Summit for Nuclear Abolition held in August 2015 in Hiroshima, Japan. As part of the Summit, youth developed a Youth Pledge for Nuclear Abolition, which, in part, expresses our pledge to "continue to educate and empower ourselves in order to better spread this awareness amongst our peers".

Based on the successful completion of the Summit and seeing the need and desire from the participants to continue working together for our shared goal of nuclear abolition, "Amplify" was created. The Amplify network was officially launched in May 2016 during the Open-ended Working Group to develop proposals to take forward multilateral nuclear disarmament negotiations. Since the launch, Amplify has actively participated in international nuclear disarmament discussions, including the recent United Nations Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards their Total Elimination, where the Treaty on the Prohibition of Nuclear Weapons was adopted. In

¹ Amplify, "Generation of Change: A Youth Pledge for Nuclear Abolition." Available from http://amplifyyouth.org/pledge/.

those forums, Amplify advocated for issues that are of prime importance to youth, such as meaningful youth participation in disarmament discussion and the significance of disarmament education

Why disarmament education

We believe that, if nuclear disarmament is to be sustainable, people everywhere must be aware of the issue and the risks associated with the weapons. Youth engagement in particular is the key to sustainability. As Amplify's working paper submitted to the Open-ended Working Group in May 2016 states, "Once youth are involved, they often stay involved. Youth who are interested in health, human rights, the environment, disaster management and, of course, international affairs can apply their expertise and contribute to nuclear disarmament." Moreover, quality disarmament education can help foster action for complete disarmament.

Disarmament education can take a variety of forms. For instance, it can be incorporated into formal education, where students are taught about the devastating effects of nuclear weapons and other weapons of mass destruction, thus advancing knowledge in school settings of the urgent need for complete disarmament. Such educational initiatives are taking place in numerous schools around the world. While often those opportunities take place in elementary, middle or high schools, it can also be effective in the institutions of higher learning. For instance, one member of Amplify recalled how she was once proud of her country for possessing nuclear weapons and developing its capabilities. However, in her graduate studies programme, she learned of the devastating consequences of nuclear weapons. That experience reversed her ideas and actually drove her to actively engage in nuclear disarmament activities

² A/AC.286/NGO/26, p. 2.

Possibly as effective are educational and awareness-raising opportunities in informal and non-formal settings, including peer-to-peer education. While disarmament may appear far removed from young people's everyday lives, seeing others in their age groups engage in the issue can be a powerful way to attract interest. It can further encourage individual actions at various levels, which is a key element of disarmament education.

The results of a 2017 peace awareness survey³ that targeted young people in their thirties and younger in the Chugoku and Kyushu regions⁴ in Japan highlights this point. In the survey, respondents were asked if they were taking any action for peace. A great majority (70 per cent in Chugoku and 66 per cent in Kyushu) stated that they would like to take some action but are currently not doing anything in particular. When asked what would encourage their engagement, more than a third of the group of youth chose "activities of other people in my generation" (38 per cent in Chugoku and 32 per cent in Kyushu), followed by "information and tools related to peace" (31 per cent in Chugoku and 34 per cent in Kyushu) and "someone to do it with" (28 per cent in both regions).⁵

In another example, a member of Amplify recounted how he became actively involved in nuclear disarmament activities. As an art student, he was not previously exposed to the issue. He was introduced to the issue by a cousin, who was active in the field. He later learned that his creative skills can also be very effective in helping nuclear disarmament campaigns communicate their messages to the public, and now he works

³ The survey was conducted by university student members of the Soka Gakkai in Japan. They collected 1,198 and 1,163 responses in the Chugoku and Kyushu regions, respectively.

⁴ The Chugoku region consists of the prefectures of Hiroshima, Okayama, Shimane, Tottori and Yamaguchi, and the Kyushu region has the prefectures of Fukuoka, Kagoshima, Kumamoto, Miyazaki, Nagasaki, Oita and Saga.

⁵ Unpublished data.

for a civil society organization advocating for the abolition of nuclear weapons. Thus, peer-to-peer education can also happen in a very casual manner and still be absolutely effective.

Amplify's efforts to promote disarmament education

As a youth network, Amplify has also promoted the importance of nuclear disarmament education. As mentioned earlier, the network originated from the International Youth Summit for Nuclear Abolition, held in Hiroshima in August 2015. The month marked the seventieth anniversary of the atomic bombings in Hiroshima and Nagasaki. The International Youth Summit gave the next generation of nuclear disarmament leaders the opportunity to learn first-hand the atrocities that took place 70 years ago and to commit to abolishing these horrific weapons of mass destruction, and inspired youth to ensure that the future is free from nuclear weapons. The final day of the Summit was a public forum, where over 250 participants mostly from Hiroshima, other neighbouring prefectures and other countries—deepened their understanding of the issue, discussed what actions they can take in their own communities and heard from the United Nations Secretary General's Envoy on Youth.

Participants of the public forum reflected that they were touched by the hibakusha's story, as well as the video of the impacts of nuclear weapons shown at the event. They also enjoyed learning from their peers as it inspired them to think of actions they could take in their own capacities. Many Japanese youth were particularly intrigued to find out that young people from other countries were actively engaged in the issue, as they tended to think of nuclear weapons as an issue deeply connected to the history of their own country. Participants also stated that they would look for other disarmament education opportunities to advance their understanding of the issue and would share what they learned with their families and friends.

In June 2017, Amplify held its Youth Summit for Nuclear Abolition on the margins of the United Nations Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards their Total Elimination. As part of the Summit, the 16 youth participants attended the United Nations conference and worked with government delegations and other civil society organizations to promote the important role of disarmament education for ensuring the universality of the Treaty.⁶ We were therefore pleased to see the inclusion of disarmament education in the preamble of the treaty.

Case study: Engaging youth in Kenya

In addition to participating in international forums, many members of Amplify are actively involved in and leading initiatives in their local communities. In this section, we highlight youth activities in Kenya through the Kenya Association of Physicians and Medical Workers for Social Responsibility (IPPNW-Kenya), where Amplify member and co-author of this paper Peter Mburu plays a leading role.

In Kenya, nuclear disarmament is not an accessible subject matter, particularly for young people. This presents an interesting opportunity largely because the youth in the world today are the most convergent and interconnected, have so much information available to them and yet the information asymmetry regarding the dangers of nuclear weapons are still apparent. This is partly due to the "security" framing and a sense of exclusion from participatory roles, as well as the lack of knowledge or opportunities to speak out.

IPPNW-Kenya has various channels through which it engages young people on issues related to nuclear disarmament. It is imperative that youth are directly engaged in issues that they want to care about but are disempowered to speak out on. Nuclear weapons are one such problem. The group starts

⁶ See also A/CONF.229/2017/NGO/WP.43.

by asking medical students to enrol in an online course called "Medical Peace Work", which helps students start to match their training background with other learning opportunities. This course bases its approach on a World Health Assembly resolution, which states, "The role of physicians and other health workers in the preservation and promotion of peace is the most significant factor for the attainment of health for all."7 It teaches about a culture of peace in the context of prevention of violence and human rights violations. The course is engaging, rather than academic. This humanizing nature of the course appeals to young health professionals because of their oath to care for life. The connection to the injustices all around us violent acts, the total disregard for basic human rights—is what draws these students. Framed this way, nuclear weapons start to become an unacceptable reality even to students who did not think of it as an issue that impacts them directly.

The Medical Peace Work courses are followed up with targeted workshops at the universities for the students who have completed the course. At this stage, peer-to-peer education and mentoring help make the students feel involved with the issues and present opportunities to connect the challenges with real world experiences. IIPNW-Kenya invites engagement by its board members and other civil society players who have been at the front line in advocacy and are more knowledgeable in different areas, such as nuclear disarmament, gender, capacitybuilding, creative resistance and use of data to challenge beliefs that plainly go against evidence. Bringing like-minded people together (in keeping with a survey from Japan mentioned earlier, structuring workshops as open, participatory forums, and sharing meaningful information all foster deepening of knowledge and awareness. This informs ability and creativity. The students are thereafter encouraged to come up with ideas of their own to help raise awareness on issues close to them in their own communities

⁷ World Health Assembly, Resolution 34.38, 1981.

The youth of IPPNW-Kenya get involved in various projects and activities, such as documentaries, film screenings, photo actions, peace walks and campaigns—all aimed at providing opportunities to educate youth and inspire them to be involved

Youth participation is further encouraged through invitations to attend civil society strategic planning workshops, leadership meetings and opportunities to share their experiences. This usually happens in the form of blog posts, short films and pictures. The youth of IPPNW-Kenya are also looking to foster other partnerships to further increase peer-to-peer education and to add alternative voices by speaking to the Africa Artists' Peace Initiative and various national debate councils to explore more ways to engage young people.

Conclusion

From our experience, we believe that it is possible to leverage the interactive culture of the youth today and their sense of social responsibility to reduce the knowledge gaps and myths surrounding nuclear weapons. Many young people in the world today want to be on the right side of history and want to participate in peace work. For this reason, risk education and quality disarmament education are vital. The history of nuclear weapons must be reframed to reflect more than factual representation or security dimensions, but also the cost to humanity—especially the disproportionate suffering of women, children and indigenous groups.

During the negotiations for the Treaty on the Prohibition of Nuclear Weapons, Amplify members met the President of the conference, Ambassador Elayne Whyte Gómez of Costa Rica, who reminded us to be mindful of "this perception, that is perhaps not accurate that the new generation is not interested in public affairs"; rather, "all over the world there are young people who are hopeful and engaged in shaping the future". In a speech during the Women's March to Ban the Bomb, one of

Engaging and empowering youth through disarmament education

our members said, "We [young people] should be encouraged and we should be educated. We own the future and we take the future." It is through disarmament education that such a sense of responsibility and initiative has been fostered. Through the work of Amplify and its affiliate groups, we hope to therefore work with others to ensure youth voices are included in disarmament work.

Bringing disarmament and non-proliferation education to young generations: Case study of high school students

Masako Toki

Introduction

The welcoming of the United Nations Study on Disarmament and Non-Proliferation Education (A/57/124) by the United Nations General Assembly in 2002 is marked as one of the most important achievements in the history of disarmament and non-proliferation education efforts. Although this event did not receive grandiose attention or fanfare, it was the culmination of multiple efforts to promote disarmament and non-proliferation education during the previous three decades.

As Dr. William Potter, the founding director of the James Martin Center for Nonproliferation Studies (CNS), rightly pointed out in his article for the United Nations Institute for Disarmament Research in 2001, "education is the most underutilized tool" to solve global challenges, including disarmament, non-proliferation of weapons of mass destruction

ABOUT THE AUTHOR: Masako Toki is a Research Associate and Project Manager of the James Martin Center for Nonproliferation Studies.

(WMD) and peacebuilding.¹ It is difficult to assess how much disarmament education has progressed and expanded both qualitatively and quantitatively. One indicator, however, is the number of States parties and organizations that have submitted contributions to the biennial report of the Secretary-General on disarmament and non-proliferation education.

While the number of reports from United Nations Member States remains surprisingly low—usually less than 10—the number from non-governmental organizations has significantly increased. In particular, contributions by educational institutes and youth groups increased during the seventh biennial report (A/71/124). Nevertheless, it is still true that disarmament and non-proliferation education has not expanded enough to be widely recognized for its importance by national leaders in many States.

The year I started working at CNS coincides with the year that the United Nations Study was adopted at the United Nations General Assembly. I had a chance to write a short report on the United Nations Study for the CNS website. This gave me an excellent opportunity to learn the process, background and history of the United Nations efforts to promote such education.² In addition, I had a chance to contribute one chapter regarding disarmament and non-proliferation education to a Japanese book entitled *Disarmament of Weapons of Mass Destruction* (English translation), edited by Professor Mitsuru Kurosawa, one of the leading scholars and educators in the field of nuclear

William C. Potter, "A new agenda for disarmament and non-proliferation education", UNIDIR Disarmament Forum, three, 2001 (United Nations Institute for Disarmament Research). Available from http://www.unidir.org/files/publications/pdfs/education-for-disarmament-en-358.pdf.

Masako Toki and Fred Wehling, "United Nations study on Disarmament and Nonproliferation Education Presented to the General Assembly", CNS website, August 2002. Available from http://www.nonproliferation. org/un-study-on-disarmament-and-nonproliferation-education-presentedto-the-general-assembly/.

disarmament and non-proliferation in Japan. That chapter was the first one to discuss the United Nations Study in Japanese in that kind of scholarly publication.³

Through these experiences, I have developed a keen interest in the topic of disarmament and non-proliferation education. Most importantly, I have been fortunate to be part of several projects on this topic at CNS.

CNS education project for high school students at the Critical Issues Forum

CNS coordinates a variety of disarmament and non-proliferation education projects for a wide variety of people, from high school students to diplomats and nuclear physicists.

Although many believe that high school students are too young to be engaged in issues related to disarmament and non-proliferation, this type of conventional wisdom can often be a hindrance to engaging stakeholders in the most innovative ways, using fresh ideas for tackling the world's pressing challenges.

One of the CNS flagship education projects, the Critical Issues Forum (CIF), is a unique non-proliferation and disarmament education project. High school students and teachers around the world, including the United States, Japan and the Russian Federation come together to promote awareness of the importance of these issues. The project also aims to develop the critical thinking skills of high school students and to develop an application among participants of different national and cultural perspectives on complex but vital international security issues. As delineated in the United Nations Study, disarmament and non-proliferation education requires an interdisciplinary approach and multiple perspectives.

³ Mitsuru Kurosawa, "Tairyohakaiheiki no gunshukuron" ("Disarmament of WMD"), 2004.

The United Nations Study emphasizes that it is important to teach students how, rather than what, to think in this field. Objectives mentioned in the United Nations Study are all relevant to the Critical Thinking Curriculum Model, the pedagogical basis of the CIF programme. This model fosters a multidisciplinary approach. Students in the programme investigate real-world problems related to WMD non-proliferation from political, sociocultural, economic and scientific perspectives.

The Study also encourages adopting a multidisciplinary approach for disarmament and non-proliferation education. The global demands of disarmament and non-proliferation issues require both learners and educators to take this multifaceted approach to finding solutions to global challenges.

According to the United Nations Study, the overall purpose of disarmament and non-proliferation education and training is to empower people through education so that they learn to contribute to solutions for international peace and security. To achieve this purpose, the teaching methodologies need to be innovative, creative and effective.

Drawing upon the knowledge and experience of technical and policy experts at CNS and experienced high school educators, CIF develops curriculums, methods and resources for students to conduct directed research on topics related to the disarmament and non-proliferation of WMD, focusing mainly on nuclear weapons. Since CNS began the CIF programme in 1997, thousands of high school students around the world have been involved. Starting with high schools in the United States and the Russian Federation, students from China and Japan have since joined the project.

Coordinated by CNS, CIF provides students with instruction and guidance in research evaluation, information synthesis and writing to help them develop critical thinking skills and promote cooperation among participating schools. Each academic year, CIF selects a topic, taking into

consideration current global non-proliferation and disarmamentrelated events. The CIF curriculum promotes higher-order thinking skills by engaging students in original research on topics of national and international importance.

Participating teachers have successfully conducted the programme in a wide variety of subject courses, including aerospace science, physics, chemistry, current issues, government, history, global studies, English and computer science. The teachers are able to adapt the curriculum to meet United States state educational standards.

The CIF programme also encourages students to develop and deliver research products in innovative and creative formats that address nuclear non-proliferation and disarmament issues that will enhance peace and security for all mankind.

Based on each year's topic, CIF project members develop user-friendly non-proliferation and disarmament education modules and learning materials designed for high school students who are participating in the project. However, these educational materials can be used by anyone who is interested in the topic regardless of participation. CNS has continued to develop project-related online educational resources. This way, a wider audience can join the project using the CNS educational materials. While meeting face to face is the best way to communicate, utilizing online educational materials effectively is also one of the most important measures to promote disarmament and non-proliferation education to a larger audience.

CNS subject matter experts, in consultation with high school education specialists (curriculum designers, teacher trainers and website designers) and experienced high school teachers, will create an online programme curriculum on the project website.

Each annual CIF project typically includes the following key elements:

- Online teachers workshop where CNS experts give lectures to teachers. All the lectures will be recorded.
- Study undertaken by students on non-proliferation and disarmament issues based on each year's topic in the lead-up to the spring conference under guidelines from teachers and CNS experts.
- The International Students Conference where students present their semester-long studies.
- Project evaluation and post-conference briefing.

Russian high schools from closed nuclear cities

Partnerships with Russian schools from closed nuclear cities⁴ began in 2001. Participation of several high schools from the Russian Federation's closed nuclear cities is an important aspect of the CIF programme. Since the closed nuclear cities were created to support nuclear facilities and the families of their employees, the cities' activities and people's lives centre on nuclear facilities. Therefore, educating those who live in these cities on non-proliferation and disarmament issues will significantly influence global security.

Japanese high schools' participation

In 2013, CIF reached a significant milestone. For the first time in the history of the CIF project, it engaged Japanese high schools from Hiroshima and Nagasaki, the two cities devastated by atomic bombs in 1945. Every year since then, Japanese schools have participated in the project, the number of Japanese schools have increased, and the project has expanded to include other cities in Japan as well.

^{4 &}quot;Closed" nuclear cities were established by the Soviet Union to produce nuclear weapons and their essential components during the cold war. The inhabitants in these cities are directly and uniquely connected with nuclear issues.

Hiroshima and Nagasaki student presentations were naturally based on their own cities' first-hand experience of nuclear devastation. Students from other cities in Japan also placed emphasis on the Hiroshima and Nagasaki experience, as Japan is the only country that has experienced wartime nuclear devastation. While each Japanese school comprehensively studied current global proliferation challenges, their message was clear: the vital importance of understanding the real effects of the use of nuclear weapons against human beings and their long-lasting effects on both humanity and the environment. The Japanese schools brought fresh perspectives to the CIF project.

Japanese schools' participation reaffirmed the importance of youth exchange between Japan and the United States in the field of disarmament and non-proliferation education. While the close relationship between the two countries is unrivalled. disarmament cooperation education them proliferation between is surprisingly scarce. The two countries' special ties and significant roles in creating a safer and more secure world through nuclear disarmament and non-proliferation education cannot be overstated

Recent conferences

In 2015, to commemorate the seventieth anniversary of the 1945 atomic bombings of Hiroshima and Nagasaki, the CIF Student's Conference was held in Hiroshima, the first city to have ever experienced nuclear devastation. Learning the real impact of the use of nuclear weapons directly from Hiroshima and Nagasaki is the best way to understand how inhumane nuclear weapons are. The three-day conference included two days of student presentations at Hiroshima Jogakuin, where participating schools demonstrated studies on semester-long this vear's topic. Disarmament: Humanitarian Approach".

The last day of the conference featured speeches by then Foreign Minister Fumio Kishida, Governor of Hiroshima

Hidehiko Yuzaki, and a keynote speech by Mr. Yoshitoshi Nakamura, the Deputy Director General in the Ministry of Foreign Affairs' Disarmament, Non-Proliferation and Science Department. The students also organized a showcase of their presentations from the previous day. In addition, a panel discussion featuring students from each country was moderated by Professor Nobumasa Akiyama, one of Japan's foremost nuclear disarmament and non-proliferation experts.

To further enhance their understanding of the horrors that nuclear weapons cause, teachers and students visited the Hiroshima Peace Memorial Museum and heard a first-hand account of 6 August 1945 from a hibakusha, an atomic bomb survivor. All participants agreed that their CIF experience in Hiroshima was informative, enriching and enlightening.

Learning from someone who was actually involved in nuclear weapons policy is also another great way to understand how dangerous such weapons are and how close we have come to the use of nuclear weapons. In 2016, the CIF spring conference featured former United States Secretary of Defense Dr. William J. Perry. Dr. Perry and his daughter, Ms. Robin Perry, joined the conference for the entire second day's session, which featured a dialogue session between him and the students, moderated by Dr. William Potter, CNS founding director. This direct interaction with a former top-ranking United States defence official who had been deeply involved in United States nuclear weapons policy was an exciting and rare opportunity for participants.⁵

Under that year's theme, "Global Nuclear Vulnerability: Lessons for a More Secure and Peaceful World", students held informative and dynamic discussions that built upon their semester-long preparation as part of the CIF project. Students and teachers effectively inspired each other and learned from

⁵ Critical Issues Forum, spring 2016 conference report. Available from http://sites.miis.edu/criticalissuesforum/2016/04/28/2016-conference-report/.

other school presentations. It was truly encouraging to see those young future leaders working together to find ways to reduce nuclear dangers.

Before he started his keynote address, Dr. Perry kindly applauded CNS for holding this "unique and insightful" educational conference, saluting Dr. Potter and CNS for "pioneering" non-proliferation and disarmament education, and for his tireless and creative efforts to promote such education. He emphasized the importance of education to reduce nuclear dangers and highlighted that starting such education at the high school level was an effective way to spark a lifelong engagement with the issue. These words of wisdom by someone who was directly involved in United States nuclear-weapon policy has significantly encouraged the continued engagement of high school students in non-proliferation and disarmament education.

The most recent CIF student conference was held in Nagasaki from 3 to 5 April 2017.6 The three-day conference included two days of student presentations at Kwassui High School in Nagasaki, where all the participating schools demonstrated their semester-long studies on this year's topic, "Comprehensive Nuclear-Test-Ban Treaty and its Role for a World Free of Nuclear Weapons". Six high schools from across the United States and four high schools from the Russian Federation's closed nuclear cities joined the seven Japanese high schools from different parts of the country at the conference in Nagasaki.

On 4 April, Dr. Lassina Zerbo, Executive Secretary of the Comprehensive Nuclear-Test-Ban Treaty Organization, joined the public symposium of the CIF conference that was held in the Nagasaki Atomic Bomb Museum Hall. In addition to his inspiring keynote address, Dr. Zerbo also joined the students' panel discussion moderated by Professor Keiko Nakamura at

⁶ Critical Issues Forum, spring 2017 conference report. Available from http://sites.miis.edu/criticalissuesforum/2017-conference-report/.

the Research Center for Nuclear Weapons Abolition at Nagasaki University. The CIF project also made efforts to engage the local community and local governments in the event. Those who joined the symposium to congratulate the CIF participants included Mr. Tomihisa Taue, Nagasaki Mayor; Mr. Hodo Nakamura, Nagasaki Governor; and Dr. Kozo Akino, a Member of the House of Councilors of the Japan's National Diet.

The main reason for holding the conference in Nagasaki was to strengthen our determination to ensure that Nagasaki would be the last city to experience nuclear devastation. These future leaders learned many important things from the hibakusha of Nagasaki, who had experienced the horror of nuclear weapons first-hand, and endured unspeakable ordeals. There are many obstacles to overcome to make sure that nuclear weapons will never be used again.

Conclusion

The global nuclear situation is more dangerous than ever, as can be seen by recent world events. As a consequence, education about disarmament and non-proliferation has become more important than ever. The vision of a world without nuclear weapons can only be realized if future generations continue to accelerate the momentum towards nuclear non-proliferation and disarmament.

When former United Nations Secretary-General Ban Ki-moon made his major disarmament education speech at the Middlebury Institute of International Studies at Monterey in 2013, he said, "education can help the world to build a global culture of peace that rejects all weapons of mass destruction as illegitimate and immoral ... It is easier for students to learn the logic of nuclear deterrence 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." This statement convincingly supports disarmament and non-

Bringing disarmament and non-proliferation education to young generations

proliferation education for young generations that helps develop their critical thinking skills.

Many high school students who have been involved in the CIF project have testified that the participation in the project was a life-changing experience and that they had become more interested in world peace and nuclear disarmament. Many of them expressed their desire to continue to study disarmament and non-proliferation issues. For these students, regardless of the actual career paths they will eventually select, it is clear that these future leaders will have a positive impact on peace and security in the world.

The power and promise of education to achieve this goal should be more widely recognized by world leaders. The fifteenth anniversary of the welcoming of the United Nations Study would be the appropriate place to start to strengthen this effort.

Revisiting disarmament and non-proliferation education

William C. Potter

On the occasion of the fifteenth anniversary of the preparation of the United Nations Group of Governmental Experts report on disarmament and non-proliferation education (A/57/124), it is appropriate to revisit the report and take stock of the implementation of its recommendations. Having drafted the discussion paper for the Secretary-General's Advisory Board on Disarmament Matters that gave rise to the Expert Group, I take particular pleasure in noting those areas in which the recommendations of that body have been successfully implemented. However, it also is necessary to acknowledge a number of areas in which more work is needed. Rather than attempt to provide a thorough assessment of the implementation of the United Nations Study, I will limit my analysis primarily to several of its key recommendations dealing with evolving pedagogic methods. I will also discuss the extent to which some of the recommendations dealing with "next stages and implementation" have in fact been implemented.

ABOUT THE AUTHOR: William C. Potter is the Director of the James Martin Center for Nonproliferation Studies and the Sam Nunn and Richard Lugar Professor of Nonproliferation Studies at the Middlebury Institute of International Studies at Monterey.

Underlying premises

The basic premise underlying the United Nations Study was that neither national governments nor international organizations were investing adequately in long-term programmes of disarmament and non-proliferation education and training. As a consequence, the Group of Governmental Experts recognized that the international community faced a predicament on a global scale in which otherwise well-educated citizens and many of their representatives were surprisingly complacent about and ignorant of major disarmament and non-proliferation issues. They also realized that although this low knowledge base was unacceptable, it was understandable given the very limited opportunities for study of the subject in nearly all countries.

A second underlying premise of the Study—one that made it possible for the diverse group of experts to produce a consensus report then—was that contemporary disarmament and non-proliferation education should strive to teach "how to think" rather than "what to think" about peace and security issues. The key educational objective, in other words, was developing critical thinking skills.

Disarmament and non-proliferation pedagogy

Six of the 34 recommendations made by the Group of Governmental Experts, endorsed by the Secretary-General, and incorporated in United Nations General Assembly resolution 57/60, deal explicitly with "ways to utilize evolving pedagogic methods, particularly the revolution in information and communications technology". They pertain, among other things, to the importance of using techniques such as participatory learning, internships in United Nations

See Recommendations 21 to 27 in United Nations Study on Disarmament and Non-Proliferation Education, Report of the Secretary-General (A/57/124), 30 August 2002, pp. 18-19.

organizations with special competence in disarmament and non-proliferation, and online/distance learning.

• Participatory learning. More often than not, learning in the classroom is a passive experience in which students try as best they can to absorb insights and information from lectures given by their instructors. This is the case regardless of the subject matter, including with respect to those relatively few courses with a focus on disarmament and non-proliferation. An alternative approach may be thought of as active learning in which students acquire knowledge, skills and empathy through the process of role-playing. This can take the form of a short exercise or module in which students assume the role of policymakers or negotiators with a specific task to accomplish or can extend over a number of months or even an entire semester. Regardless of the duration of the simulation, the approach conceives of the instructor primarily as a facilitator rather than a lecturer, and encourages students to acquire negotiating experience, technical knowledge, and understanding of another organization or country's perspectives by fully immersing themselves in the roles they are playing. Students learn from each other, hone their speaking and interpersonal skills, grapple with "real world" nuclear disarmament, non-proliferation and regional security issues, and most importantly acquire the ability to "see with the eyes of others".

I have used simulations as a pedagogic tool at the undergraduate and graduate level for over 40 years, usually conducting semester-long bilateral United States—Soviet/Russian arms control negotiations or multilateral negotiations focused on the review process of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Although each simulation has a unique dynamic and a successful negotiation is by no means preordained, almost inevitably I feel like an alchemist. I know how to mix the ingredients and the product almost always is "golden", but

the precise process by which non-proliferation novices are typically transformed into accomplished negotiators, who are hard to distinguish from their real-world counterparts. remains mysterious. Most probably, the transformation involves a combination of high student motivation, peer pressure, a focus on pressing contemporary issues, the opportunity to interact with experienced diplomats during the negotiations, and the remarkable power of "active learning—i.e., learning by doing". As one distinguished former Soviet arms control negotiator explained to me after I had spoken to his class about the simulation pedagogy at the then Soviet Diplomatic Academy, "You have discovered an elixir, which I also must acquire." According to him, he could lecture forever to his very bright students, but they would inevitably leave his class with no real understanding of what they would encounter when they assumed their initial postings as diplomats. What they needed, he determined, was engagement in an active mode of learning, such as simulations. And, in fact, the following summer we team-taught a two-week United States-Soviet arms control negotiation involving students from the United States, the Soviet Union and Germany.²

• On-the-job training. Formal coursework is an essential component of disarmament and non-proliferation education, especially for students who seek to become experts in the field. An important supplement to coursework is on-the-job training, which can be undertaken at a variety of venues, including university research centres, non-governmental organizations, government agencies and international organizations.

An approach we have found to be very effective at the Middlebury Institute of International Studies at Monterey (MIIS) is to offer a combination of

² The Soviet diplomat was Ambassador Viktor Israelyan. The joint course was offered at the University of Bonn.

competitive research assistantships at the James Martin Center for Nonproliferation Studies (CNS), along with opportunities for semester-long internships at international organizations. Each semester, approximately two dozen graduate students are selected to work on a variety of policy-oriented research projects at CNS under the supervision of experienced staff members. In this fashion, they learn to apply the knowledge they have acquired in the classroom to address practical non-proliferation and disarmament problems. For example, research assistants may be involved in monitoring and analysing reports of illicit nuclear trafficking incidents, interpreting satellite imagery of ballistic missile tests, assessing means to verify nuclear disarmament and non-proliferation accords, and examining the impact of evolving disruptive technologies on existing export control regimes.

In addition, every semester, students at MIIS have the opportunity to compete for internships at international organizations, with responsibilities related to disarmament and non-proliferation, including the International Atomic Energy Agency, the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the Organisation for the Prohibition of Chemical Weapons and the United Nations Office for Disarmament Affairs (UNODA). These internships provide students with practical "on-the-job" training for future careers in the field and enable them to observe first-hand the complexities of international politics.

While most internships in the non-proliferation and disarmament sphere cater to graduate students, for the past 20 years CNS has offered highly competitive summer internships for undergraduate students from the United States and abroad (see http://sites.miis.edu/summerintern/). Students who are selected for the 10-week summer programme combine participation in a specially designed lecture series and research on contemporary policy issues

under the supervision of CNS experts. This programme has proved to be especially popular as it enables highly motivated students to acquire intensive training on non-proliferation and disarmament topics, which unfortunately are not available even at many of the world's top universities and colleges.

• Distance learning. At the time of the original United Nations Group of Governmental Experts on Disarmament and Non-Proliferation Education, there was great interest in and enthusiasm about the opportunities for expanding the reach of education afforded by rapid advances in information and communications technology. particular, great hope was placed in the application of distance learning as a means to deliver information about disarmament and non-proliferation in multiple languages to underserved audiences around the world. To some degree this optimism was merited, and significant strides have been taken in preparing educational resources for different age groups online. Relevant materials can be found at numerous websites, including those of UNODA. the CTBTO, the Nuclear Threat Initiative, CNS, the European Union Non-Proliferation Consortium and the William J. Perry Project. Regrettably, relatively few online resources in the disarmament and non-proliferation sphere are available in multiple languages, and most materials are in English. A notable exception in this regard is a collection of CTBTO tutorials available in seven languages. Sadly, the "Cyberschoolbus", an innovative site for children that included material related to disarmament previously maintained by the United Nations Department of Public Information, was shut down due to some technical reasons.

Members of the United Nations Expert Group recognized the need for a central clearinghouse of digital information, and UNODA and the United Nations Institute for Disarmament Research were viewed as logical bodies to serve as repositories for multilingual online courses and other materials. Although UNODA provides useful information about various disarmament and non-proliferation activities, including with respect to online modules, there is currently no single website that serves as a one-stop clearinghouse for digital materials in the disarmament and non-proliferation sphere.

• New tools and technologies. There is no specific reference in the recommendations of the United Nations Expert Group about the value of "open source" information for purposes of education and training. However, it was generally appreciated that ongoing advances in technology would undoubtedly provide new tools for the study of disarmament and non-proliferation. What was unforeseen 15 years ago was how rapidly some new tools such as remote sensing, 3-dimensional (3D) modelling, big data analysis, virtual reality environments and social media platforms would evolve and how accessible they would become. Today, students at MIIS—and basically anyone with a laptop—can download satellite images of weapons of mass destruction-related facilities with a resolution previously available to only a few States. Similarly, they can use software, such as SketchUp, in combination with commercial satellite imagery to create models for the purpose of solving verification problems or challenging intelligence assessments offered by government sources. In many ways, these new tools and others like them empower individuals around the world by providing them with enormous capabilities for research and analysis.

Today, the main limitation in the application of new tools and technologies for disarmament and non-proliferation research is training in how to use the tools, how to interpret the findings, and how best to employ a variety of tools—both new and traditional—in tandem. Thus, while the tools themselves are very accessible, there are relatively few venues available for training in their use. To help remedy this situation, CNS, in collaboration with the Skoll Global

Threats Fund, has developed several e-learning modules to assist non-experts understand a variety of new tools and how they can be applied to non-proliferation challenges. The CNS online New Tools Courseware Portfolio includes courses on "Advanced Tools for Searching the Internet", "Satellite Imagery Analysis" (two modules) and "Geographic Information Systems" (two modules). Additional courses on "3D Modelling" and "Photo Analysis" are under development.³

Next stages and implementation

The last set of recommendations made by the Group of Governmental Experts falls under the heading of "Next stages and implementation". They pertain to encouraging (1) Member States to designate a focal point for disarmament and non-proliferation, (2) the Secretary-General to prepare a report on a biennial basis reviewing the implementation of the 34 recommendations, (3) Member States to provide information on their implementation of the recommendations, and (4) the General Assembly to allocate human and financial resources adequate to facilitate implementation of the recommendations.

The good news to date is that all Member States continue to endorse the general concept of disarmament and non-proliferation education, as reflected in the adoption of resolutions on the topic at meetings of the First Committee. Also encouraging—and unanticipated at the time of the release of the original report of the Group of Experts—was the introduction of the topic of disarmament and non-proliferation education into the NPT review process. Beginning in 2002, the importance of the issue has typically been referenced in the Preparatory

³ The "CNS New Tools Courseware Portfolio" is available from https://learn-new-tools.org/.

Committee Chair's Factual Summary.4 The issue also was explicitly noted in Action 22 of the Final Document of the 2010 NPT Review Conference, which encouraged all States "to implement the recommendations contained in the report of the Secretary-General of the United Nations (A/57/124) regarding the United Nations study on disarmament and non-proliferation education, in order to advance the goals of the Treaty in support of achieving a world without nuclear weapons". 5 In addition, the importance of disarmament and non-proliferation education was highlighted in the reports of the 2013 and 2016 Open-ended Working Groups on Taking Forward Multilateral Nuclear Disarmament. It therefore was disappointing that the Treaty on the Prohibition of Nuclear Weapons, concluded in July 2017, chose to depart from the established formulation. Its preamble references the importance of "peace and disarmament education" rather than "disarmament and non-proliferation education".

Also disappointing, and more significant, is that relatively little progress has been made in translating support in principle into global action. In fact, notwithstanding frequent First Committee and NPT statements on the subject, few States appear to be aware of the content of the recommendations of the United Nations Expert Group, and even fewer have implemented them. Indeed, even as simple an obligation as reporting on a biannual basis to the General Assembly of their country's implementation of the recommendations is routinely ignored by the overwhelming majority of States, including many of those represented in the United Nations Expert Group. For example, in 2016 only six countries (Japan, Mexico, Qatar,

⁴ The issue was first referenced in an NPT document in the Chair's Factual Summary at the 2002 NPT Preparatory Committee meeting. See http://www.nuclearfiles.org/menu//library/treaties/non-proliferation-treaty/prepcom/trty npt prepcom 2002 chairman-sum 2002-04-18.htm.

⁵ See 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. I (NPT/CONF.2010/50 (Vol. I)).

Spain, Turkmenistan and Ukraine) contributed to the report of the Secretary-General, and the report for 2014 was only slightly better with 10 countries (Argentina, Austria, Cuba, El Salvador, Germany, Iraq, Japan, Mexico, Panama and Portugal) providing contributions.⁶ To be sure, these figures understate the important contributions made by several countries in the sphere of disarmament and non-proliferation education. But they point to the much greater effort that is required if the promise of the General Assembly resolution from 2002 is to be realized.

Priority next steps

Former United Nations Secretary-General Kofi Annan astutely observed that "education is quite simply, peace-building by another name". And yet, despite periodic appeals, education remains an underutilized tool for promoting peace, disarmament and non-proliferation. This is a point I made in 2001, shortly before the adoption of United Nations Expert Group report, and it remains the case today. In part this predicament is a consequence of a fixation by national Governments on quick solutions to immediate crises, rather than investing in long-term programmes of disarmament and non-proliferation education and training. While it is unrealistic to expect this situation to change soon, there are several concrete steps States could take to ameliorate the problem.

⁶ See the biennial reports of the Secretary-General on Disarmament and Non-Proliferation Education for the seventy-first and sixty-ninth sessions of the General Assembly at https://www.un.org/disarmament/education/sg-reports.html. Reports for earlier sessions also are available from this web page.

⁷ "Secretary-General in Address to 'Learning Never Ends,' Colloquium, Call Education Investment Which Yields Highest Profit", press release SG/SM7125, 10 September 1999, p. 2.

See William C. Potter, "A New Agenda for Disarmament and Non-Proliferation Education", *Disarmament Forum*, special issue on education for disarmament, 3/2001 (United Nations Institute for Disarmament Research, Geneva).

First, it is essential to find mechanisms to alert Governments (and appropriate individuals/offices within Governments) to their reporting requirements under General Assembly resolution 57/60. It is likely that many States fail to act because they are ignorant of the resolution. At a minimum, members of the Secretary-General's Advisory Board on Disarmament Matters should convey to appropriate officials in their home Governments the thrust of the General Assembly resolution, as well as the expectations for biannual reports. The initiative, after all, originated from the Advisory Board, which also has responsibilities for monitoring the implementation of the resolution.

Second, far more States, including the nuclear-weapon States (NWS), should join as co-sponsors of the working papers and resolutions that are routinely presented in the context of the NPT review process and the First Committee, respectively. Several of the NWS have been leaders in the field of education and should not be reticent in reporting their accomplishments. Illustrative of this work is the launch in 2016 of a new Dual Degree in Nonproliferation Studies involving the Moscow State Institute of International Studies and the Middlebury Institute of International Studies at Monterey. This M.A. degree programme requires students to study in both Moscow and Monterey, and to spend one semester as an intern at an international or other organization engaged in the sphere of non-proliferation. At a time when it is difficult to find issues on which NWS and Non-Nuclear Weapon States agree, disarmament and nonproliferation education is a noteworthy exception.

Funding constraints obviously are a major impediment to implementation of some of the recommendations of the Expert Group, and to date neither United Nations Member States nor the General Assembly have demonstrated an inclination to allocate human and financial resources adequate to facilitate implementation of the Group's recommendations. As former United Nations Secretary-General Ban Ki-moon observed in a speech at MIIS in 2013, "Funding for disarmament education,

training and research remains low to non-existent in many States. Most damaging of all, the next generation of leaders, legislators, and administrators is being encouraged not to think." It is high time for a number of States, including those possessing nuclear weapons, to adopt national legislation that provides modest funds in the form of competitive scholarships for students to pursue graduate studies in the areas of non-proliferation and disarmament. Such action would create incentives for more universities to introduce courses in this field and encourage the best and the brightest students to specialize on weapons of mass destruction issues.

At its fifty-fifth session in 2000, the General Assembly adopted a resolution sponsored by Mexico and 15 other States to conduct a two-year United Nations study on disarmament and non-proliferation education. Two years later, the Secretary-General endorsed the Study's report, and its recommendations were incorporated in a General Assembly resolution. On the fifteenth anniversary of that historic occasion, it is appropriate to celebrate the success that has been made in moving forward the process of disarmament and non-proliferation education. As former United Nations Secretary-General Kofi Annan wisely observed, "education is the most effective form of defense spending". As such, it is imperative that we invest far more in education as a means to pursue disarmament and non-proliferation goals and to prevent future catastrophes. The challenge is great, as is the opportunity.

⁹ Speech by Secretary-General Ban Ki-moon at the Monterey Institute of International Studies on 18 January 2013.

[&]quot;Secretary-General in Address to Learning Never Ends" (SG/SM7125), p. 2.

Related to the lives and concerns of the learners: Revitalizing undergraduate disarmament education through Model UN simulations and service learning

Matthew Bolton

There are few higher education institutions in the United States, or even in much of the world, which offer a rigorous and robust programme of disarmament education. The concept garners little attention in academia. Even within the United Nations General Assembly First Committee, on disarmament and international security, the topic receives little attention from States. Few States submit reports to the United Nations Secretary-General as requested by successive resolutions and there is scant funding available for substantive programming.

It was this "anemic vision of disarmament education" that prompted Pace University Peace and Justice Studies student Rachel Salcedo, to make a statement on behalf of 12 civil society organizations to the seventy-first session of the First Committee in October 2016. Salcedo affirmed the potential of

ABOUT THE AUTHOR: Matthew Bolton is the Director of the International Disarmament Institute at Pace University.

disarmament education to "empower the greater participation of youth, women, survivors of violence and people from the Global South in peace and security policymaking". But, in order to do so, States, civil society and academic institutions needed to recognize the impact of "unequal access" to disarmament education "in marginalizing some people from multilateral deliberations".\(^1\) In developing more ambitious approaches, Salcedo pointed to the still-relevant declaration of the 1980 United Nations Educational, Scientific and Cultural Organization's World Congress on Disarmament Education, which asserted that, to be "effective", disarmament education had to "be related to the lives and concerns of the learners" and engage with "the political realities within which disarmament is sought".\(^2\)

It is this more vigorous vision of disarmament education—practical, engaged, immersed in the political arena—that has guided our efforts on Pace University's New York City campus. Indeed, observing our work, a staff member of the International Campaign to Abolish Nuclear Weapons commented:

Pace is one of a small number of academic institutions—anywhere in the world—that takes disarmament education seriously. Indeed, it is a leader in the field, teaching the theory and practice of disarmament in a way that is both meaningful for

¹ See Rachel Salcedo (12 October 2016), "Disarmament Education: Civil Society Statement for the 71st Session of the General Assembly First Committee, 12 October 2016". Available from http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/6/statements/12Oct disarmament-education.pdf.

² See United Nations Educational, Scientific and Cultural Organization (6 October 1980), World Congress on Disarmament Education, Report and Final Document (SS-80/CONF.401/37 Rev). Available from http://www.peace-ed-campaign.org/wp-content/uploads/2016/05/world_ congress disarmament ed.pdf.

students and beneficial to society. More institutions should follow its example.³

This chapter first provides an overview of the development of disarmament education at Pace University and then offers detail on two undergraduate initiatives: the Model United Nations (UN) programme and a service learning class on the "Global Politics of Disarmament and Arms Control". It concludes with brief reflections on making disarmament education more relevant to the "lives and concerns of the learners", as well as global "political realities".

Development of disarmament education at Pace University

Pace University is a private university with campuses in Manhattan and Westchester County, New York. Inspired by its motto of *Opportunitas*, Pace educates "thinking professionals", often drawn from the area's diverse immigrant and working class communities, by combining the liberal arts with practical, vocationally relevant skills, often rooted in its social context. One group of Pace scholars reflected, "our campus is less an Ivory Tower than a permeable membrane", open and engaged with life outside the classroom.⁴

It is thus not surprising that a group of Pace students would participate in one of the first Model UN simulations to take place in the newly constructed United Nations building in 1950, representing Ecuador in the Intercollegiate Model Meeting of the United Nations Security Council. In the 1970s, Model UN was integrated into the Political Science curriculum; it has

³ See Tim Wright (21 May 2015), Model United Nations Program, Pace University, "Pace University Faculty and Students Work for Nuclear Disarmament at United Nations". Available from https://pacenycmun. org/2015/05/21/pace-university-faculty-and-students-work-for-nuclear-disarmament-at-united-nations/.

⁴ See Emily Welty, et al (eds.) (2013), Occupying Political Science: From New York to the World (New York, Palgrave Macmillan), p. 276.

remained a core part of that major. Meanwhile, a series of Pace professors were innovating engaged research on disarmament matters. Professor Benjamin Ferencz, one of the prosecutors at the Nuremburg trials of Nazi war criminals, ran the Pace Peace Center at the School of Law. Professor Ferencz's theoretical work outlined some of the foundations of modern international law and advocated strongly for comprehensive disarmament.⁵

In recent years, Pace University has established expertise in socially engaged education and research. Its Center for Community Action and Research oversees a civic engagement requirement in the core curriculum, required of all undergraduate students. Pace's Helene and Grant Wilson Center for Social Entrepreneurship, established in 2005, has supported faculty research on and student internships with non-profit organizations involved in peace and disarmament advocacy. In 2015, Dr. Emily Welty expanded the Peace and Justice Studies minor into a full undergraduate major on the New York City campus. The curriculum includes an introductory class with a service learning requirement, placing students with peace and social justice organizations around the city. Pace is the only university in Manhattan that offers such a major.

Given these interests, Pace faculty and students have participated as advisors, volunteers and interns with global civil society campaigns during meetings of the First Committee, the Convention on Certain Conventional Weapons and the Treaty on the Non-Proliferation of Nuclear Weapons, as well as negotiations on the Arms Trade Treaty (ATT), and the Treaty on the Prohibition of Nuclear Weapons (TPNW). Since 2014, Pace's New York City campus has hosted three annual Humanitarian Disarmament Forums. Nobel Peace Laureate Jody Williams addressed the 2014 meeting. During the seventy-first session of the First Committee, Pace University submitted a report to the United Nations Office for Disarmament Affairs

⁵ See Benjamin Ferencz (no date), "Story 59: The Pace Peace Center". Available from http://www.benferencz.org/1970-present.html#story59.

(UNODA) on its contribution⁶ to the implementation of the 2002 report of the United Nations Secretary-General on disarmament and non-proliferation education.

In 2016, Pace established the International Disarmament Institute, an academic centre for education and research on global disarmament, arms control and non-proliferation policymaking (www.pace.edu/dyson/disarmament). In partnership with the Control Arms secretariat, the Institute has already implemented a programme of training on the ATT for East African officials and civil society advocates, funded by a grant from the United Nations Trust Facility Supporting Cooperation on Arms Regulation.⁷ It also contributed to the TPNW negotiations, disseminating policy research on provisions regarding victim assistance, environmental remediation and disarmament education.⁸ A key aspect of the Institute's work is strengthening Pace University's own disarmament education efforts, including Model UN and a dedicated Political Science class on disarmament.

⁶ Pace University (2016), "Disarmament and non-proliferation education and training efforts covering the last two years (from July 2014 until June 2016)", submission to UNODA. Available from https://unoda-web. s3-accelerate.amazonaws.com/wp-content/uploads/assets/education/docs/ SGReport71contributions/NGOs/Pace-University.pdf.

Nee International Disarmament Institute (2016), "The Role of Education in Advancing Arms Trade Treaty Universalization and Implementation: Lessons Learned from ATT Academy East Africa 2016-2017". Available from https://disarmament.blogs.pace.edu/2017/05/31/the-role-of-education-in-advancing-arms-trade-treaty-universalization-and-implementation-lessons-learned-from-att-academy-east-africa-2016-2017/.

E.g., International Disarmament Institute (June 2017), "Strengthening the Positive Obligations on Victim Assistance, Environmental Remediation and Norm Promotion in the Draft Convention for the Prohibition of Nuclear Weapons" (A/CONF.229/2017/NGO/WP.36). Available from https://s3.amazonaws.com/unoda-web/wp-content/uploads/2017/06/A-CONF.229-2017-NGO-WP.36.pdf.

Model UN as disarmament education

Model UN was specifically highlighted by the 2002 United Nations Secretary-General's report on disarmament and non-proliferation education as an example of appropriate "participatory learning approaches" (Recommendation 23, A/57/124). A compelling pedagogical method, Model UN offers students the opportunity to learn about global diplomacy through simulations of multilateral decision-making. Each student is assigned a specific country and committee (sometimes in pairs), which they research in detail, while learning about the United Nations system, practicing public speaking, writing a policy position paper and becoming familiar with formal rules of procedure. They then participate in intercollegiate conferences with students from around the country and the world. The class is co-led by student Head Delegates—selected by their peers who learn skills of leadership, teaching and editing on the job. We are lucky at Pace to have generous funding for Model UN, which has enabled us to take students to conferences not only in New York, but also Washington, D.C., Geneva, Oslo, Edinburgh, Costa Rica and beyond. Given the variation in material and experience, students are able to take Model UN as a class for credit three times in the Political Science major (or once in the Peace and Justice Studies major).

Though students work on the full spectrum of concerns faced by the multilateral system, many are assigned committees addressing disarmament, arms control and non-proliferation matters. For example, Pace students have recently participated in simulations of the meetings of the First Committee, the United Nations Security Council and the International Atomic Energy Agency, as well as on the United Nations Programme of Action on the illicit trade in small arms and light weapons. They have discussed the humanitarian consequences of nuclear weapons, landmine clearance, preventing the development of biological weapons, controlling the arms trade and responding to the challenge of lethal autonomous weapon systems.

In Pace's decades of experience with Model UN, we have learned many lessons. We have found that Model UN is best integrated into the curriculum rather than being a non-credit student club. This enables faculty to set clear expectations for work and behaviour, as well as regular feedback. On the New York City campus, we have established a three-semester syllabus guiding students from a basic introduction to more advanced theory and practice. To help students with core skills, we have compiled a Model UN handbook, available online (https://pacenycmun.org/handbook/). Required reading includes core textbooks on the United Nations system, as well as articles regarding students' specific country and committee assignments.

Teaching is focused on preparing students for the conference. We start with an intensive focus on position papers, in-class writing workshops, editing from both the professor and Head Delegates and multiple drafts. In teaching rules of procedure, diplomatic skills and public speaking, we run classes as simulations of committee meetings. It is better to focus the in-class debates on topics close to students' lives—such as improving Pace University's campus and curriculum—to avoid feeling intimidated by the format.

The choice of the culminating conference is crucial. There are, unfortunately, many poorly run Model UN conferences that can be negative, disempowering experiences for students. We have found that the National Model UN conferences in Washington, D.C., and New York, as well as the Geneva International Model UN conferences, are particularly professionally run. Since many conferences (even the best ones) offer awards, it is important to instil in students that the

⁹ Students are assigned the following textbooks: first semester—Jussi M. Hanhimaki (2008), *The United Nations: A Very Short Introduction* (Oxford, Oxford University Press); second semester—Linda Fasulo (2015), *An Insider's Guide to the UN*, 3nd ed. (New Haven, Yale University Press); third semester—Abel Lanzac & Christophe Blain (2014), *Weapons of Mass Diplomacy*, Edward Gauvin (trans.) (London, SelfMadeHero).

purpose is education rather than competition; for this reason we call Model UN a "programme" rather than a "team." When badly managed, simulations, particularly of the exercise of power, can give license to inappropriate behaviour and/ or entrench regressive patterns of privilege. It is therefore essential to cultivate an environment of respect, reflection and reflexivity, stressing that while a simulation is not "real", it can have real effects on the people participating. The instructor must make clear that bullying, harassment and discrimination will not be tolerated and that the class and conference must be safe spaces for learning. We end the semester with an event on international careers (often featuring speakers from the disarmament sector). followed by evaluation and reflection on the class and conference

The result is a powerful experience that many students report as life-changing, generating a long-term interest in global policy issues, including disarmament. Though few have grown up with direct exposure to political decision-making, they report feeling empowered by what they have learned. As one student reflected, "I now aim to make a difference on the bigger problems facing the entire world for a better future, not just everyday 'little problems'." Indeed, the Model UN experience has launched many of our students into internships and jobs, including at Permanent Missions to the United Nations and disarmament advocacy non-governmental organizations (NGOs)."

Lorraine Bishop (April 2016), "I Was Inspired by Learning that Small Countries Can Make a Big Difference". Available from https://pacenycmun.org/2016/04/17/i-was-inspired-by-learning-that-small-countries-can-make-a-big-difference/#more-1845.

¹¹ E.g. Vakhtang "Vato" Gogsadze (3 May 2016), "Model UN Helped Me in My Work at the Real UN". Available from https://pacenycmun.org/2016/05/03/model-un-helped-me-in-my-work-at-the-real-un/#more-1881.

Disarmament education and service learning

While Model UN students learn much from programme, we have found there are diminishing returns from repeatedly taking the class or going to conferences. We in the Pace New York City Political Science department wanted to move students beyond simulations to exposure to the actual processes of global policymaking happening in our city. This was particularly important, given that our students often lack the privileged connections to the diplomatic and NGO community available to more elite-area universities. We already offered a specific class on the Global Politics of Disarmament and Arms Control in the fall 2014 semester, which featured guest speakers from disarmament advocacy organizations. The class covered major disarmament policy processes, organized around specific weapons issues, ranging from nuclear weapons to landmines to killer robots. The assigned background texts were UNODA's Disarmament: A Basic Guide and Reaching Critical Will's First Committee Briefing Book. 12 But students also read a disarmament treaty each week, as well as scholarly, policy and journalistic writing on the humanitarian, ethical, legal and political dimensions of weapons.

In the fall 2016 iteration of the course, we integrated more linkages to actual processes of disarmament policymaking. First, students received a tour of United Nations Headquarters and a briefing from UNODA staff. Second, students' primary assessed assignment was writing an entry on a disarmament treaty for the Geneva-based *Weapons Law Encyclopedia*. If their research met the appropriate standard, it would be included in the encyclopedia's website (www.weaponslaw.org). Third, we

Melissa Gillis (2012), Disarmament: A Basic Guide, third edition (New York, United Nations) (available from https://www.un.org/disarmament/publications/basic-guide/edition-3); Reaching Critical Will (2016), First Committee Briefing Book (available from http://www.reachingcriticalwill.org/resources/publications-and-research/publications/11112-first-committee-briefing-book-2016).

placed every student in the class with a disarmament NGO or campaigns involved with the First Committee session. In their 20-hour service learning assignments, students helped with note-taking on United Nations meetings for Reaching Critical Will, event planning for Peace Boat and the International Action Network on Small Arms and supporting advocacy with PAX, Control Arms and the International Campaign to Ban Landmines—Cluster Munition Coalition. Many were able to be present for the dramatic debate and vote on the resolution that mandated the negotiations for the TPNW, giving them the sense of watching history being made. Students presented their assignments in class and wrote reflection papers about what they had learned.

In anonymous evaluations, students highlighted the service learning assignments as the most valuable part of the class, stating that they "never would have had the opportunities with the UN" and that the experience would "stay with [them] forever". In person, they explained that what had seemed like distant and arcane subjects became real to them, giving them a sense of ownership in multilateral policymaking.

Revitalizing disarmament education

The preamble of the Treaty on the Prohibition of Nuclear Weapons reaffirms "the importance of peace and disarmament education in all its aspects". There are also opportunities to re-energize disarmament education through seeking linkages to other important multilateral educational initiatives like

Pace University's International Disarmament Institute contributed in a small way to this language, through disseminating research and convening relevant events on the margins of the negotiations—e.g., Matthew Bolton (June 2017), "Presentation of Research on Norm Promotion Provisions to Nuclear Weapons Ban Treaty Negotiations", International Disarmament Institute (available from https://disarmament. blogs.pace.edu/2017/06/21/presentation-of-research-on-norm-provisionsto-nuclear-weapons-ban-treaty-negotiations/).

Sustainable Development Goal 4 ("Quality Education") and 16 ("Peace and Justice") and Security Council resolution 2250 (2015) on youth, peace and security. In taking advantage of this renewed political interest, disarmament education should not simply be seen as public relations by United Nations and NGO agencies. Rather, in Pace University's experience, disarmament education is most successful when it engages students directly, in ways that are relevant to their lives and the political realities around them. Through simulation, service learning, guest speakers and internships, we have found that disarmament education can empower people that were once marginalized from multilateral policy processes to feel that they are part of the conversations affecting their world.

The future of disarmament and non-proliferation education: Aiming for continuity or a new direction?

Péricles Gasparini and Juliette Kohler

Disarmament and non-proliferation education is an essential tool of the international community to achieve and maintain peace. However, current practices, entailing only a few training courses developed by various institutions, do not maximize the full potential of the audiences of existing training courses. There is therefore a compelling need to take into account whole generations of people who represent an untapped audience, as they have never had access to this wealth of knowledge.

It is nevertheless possible to guide disarmament and non-proliferation education towards a new direction, rather than letting it continue on its current course. For this to happen, we call for an immediate change of paradigm in the way courses are developed and provided to the public if the international community is serious enough to give peace a chance.

THE AUTHORS: Péricles Gasparini was the Chief of the Vienna Office of the United Nations Office for Disarmament Affairs (UNODA). Juliette Kohler is a Consultant for the Vienna Office of UNODA.

I. Refocusing the way we provide disarmament and non-proliferation education

In the past 15 years, the United Nations and the diplomatic community at large have made considerable efforts towards the promotion of disarmament and non-proliferation. An array of United Nations resolutions has been adopted, contributing to the evolution of mindsets and breaking ground in some areas. A rather long standstill period followed the successive signing of the Chemical Weapons Convention, the Comprehensive Nuclear-Test-Ban Treaty and the Mine Ban Treaty (or Ottawa Convention), where no agreement was found at the disarmament negotiating forums.

Yet these last years have once more seen some groundbreaking advances, notably with the entry into force of the Arms Trade Treaty in 2014, the adoption by the United Nations Security Council of resolution 2231 (2015) on the Joint Comprehensive Plan of Action and the adoption of the Treaty on the Prohibition of Nuclear Weapons. As much as these efforts have accomplished, they are however not sufficient as threats still continue all over the world, such as the illegal trade of small arms and light weapons, terrorist attacks, the constant threats of imminent conflict on the Korean Peninsula and the use of chemical weapons in the Syrian Arab Republic.

Historically, disarmament and non-proliferation have been largely dominated by leaders, politicians, the military and scholars. This seems to have been the case in the nuclear age, as evident in the debates including since the cold war, but the fact is that these issues should interest a wider audience, including the media and the public at large. Unfortunately, it is still largely considered as men's "political business", and the public in general does not seem to be aware of the importance of disarmament and non-proliferation, nor to take an interest in it at all. As for the long-standing United Nations push for general

Research shows that women are underrepresented in the disarmament forums (showing that as little as 16 per cent of countries' delegates

and complete disarmament, no one on the streets and very few in the media would know what it is.

However, some new initiatives, such as the campaign on the humanitarian impact of nuclear weapons and the negotiation of the Treaty on the Prohibition of Nuclear Weapons, has had media appeal due to clear messaging on the devastating impact of nuclear weapons. Nevertheless, such initiatives are not yet widely supported or well known by the public in all corners of the world. This depicts a reality of different levels of access to information, interests and concerns worldwide.

One solution to this challenge is to enhance focus on disarmament and non-proliferation education: it is a non-controversial approach that brings knowledge to the public and educates all actors of civil society with the aim of giving them a voice in these matters. Threats to international security do not only concern the diplomatic community but every single person around the globe, and efforts should thus be made to reach all audiences.

A recent study² showed, for example, that the younger generation of Europeans (14-30 years old) are not aware of the dangers of nuclear weapons, nor do they feel concerned about it and show a vague support for their national policies, without

are women in 13 international forums from 2010 to 2014)—see the non-governmental organization Article36, "Women and multilateral disarmament forums: Patterns of underrepresentation", discussion paper, October 2015 (available from http://www.article36.org/wpcontent/uploads/2015/10/Underrepresentation-women-FINAL1. pdf); or Mothepa Shadung, "Are women being heard in the nuclear disarmament debate?", World Economic Forum, August 2015 (available from https://www.weforum.org/agenda/2015/08/are-women-being-heard-in-the-nuclear-disarmament-debate/).

² Benoit Pelopidas, "The next generation(s) of Europeans facing nuclear weapons: forgetful, indifferent, but supportive?", Stockholm International Peace Research Institute, *Non-Proliferation Papers*, No. 56, March 2017. Available from https://www.sipri.org/sites/default/files/The-next-generation%28s%29-Europeans-facing-nuclear-weapons.pdf.

questioning them. Educating the youth on disarmament and non-proliferation topics is of central importance and would allow youth to reach a deeper understanding of such key topics, with the hope of building a brighter future. Education is the best way, if not the only way, to advance mindsets and break new ground.

The moment is now to launch again the debate on disarmament and non-proliferation education; the fifteenth anniversary of the United Nations Study (A/57/124) provides the momentum to refocus all the attention to this topic, as it deserves.

organizations, both intergovernmental Several academic, are providing training courses on disarmament and non-proliferation and related topics, and are trying to bring interested candidates into the debate. However, the offer of training courses in this area is not sufficient. There is a strong need for a catalyst to bring together the actors of disarmament and non-proliferation education, to provide worldwide access to training courses and hence ensure the widest possible audience reaps the benefits. We could refocus the way we provide disarmament and non-proliferation education in a manner that would be beneficial by bringing new actors with different perspectives into the discussion, and by boosting research and theoretical analysis on disarmament and non-proliferationrelated topics. This would have the effect of bringing into question the status quo, as well as raising awareness on opportunities for improvement.

II. Educating women worldwide on disarmament and non-proliferation-related topics: lessons learned from a United Nations-led initiative

First, security is a prerogative of sovereign States. As such, matters linked to security, disarmament, non-proliferation

or even arms control are discussed behind closed doors in many States. These discussions involve only the highest officials, who are traditionally mainly men. Research has shown that a lasting peace is less likely to be attained if we leave half of the population out of the discussion³ and it is therefore no longer conceivable in the twenty-first century to leave women out of disarmament and non-proliferation discussions and decision-making.

Engaging women is an effective way to change mindsets. Furthermore, women have the power to shape the minds of the next generations, maybe even in a stronger way than men do. Similarities can be found in countering terrorism, for example, where efforts have been made by reaching out to mothers to fight violent extremism, bringing new perspectives and a different way of containing its spread.⁴ Perhaps the first aim of education initiatives should be to show to every member of the community that not only men (politicians, military, etc.) have the right to contribute to peace and security, but each person, regardless of gender, can make a difference, be it at the local, national or even international level

Secondly, to attract the interest of the youth, the content of disarmament and non-proliferation education should be adapted in order to remain close to the interests of the audience, considering specificities of various regions and cultures. Depending on their age, the concerns of the audience may also differ. One method is to bring education to the local level, employing teachers from the same culture, using

³ See a study of 156 peace agreements, controlling for other variables, Laurel Stone (2015), "Quantitative Analysis of Women's participation in Peace Processes", *Reimagining Peacemaking: Women's Roles in Peace Processes*, annex II (New York, International Peace Institute). Available from https://www.ipinst.org/wp-content/uploads/2015/06/IPI-E-pub-Reimagining-Peacemaking-rev.pdf.

⁴ See, for example, "Mothers for change" initiative, conducted by the non-governmental organization Women without borders. Available from http://www.women-without-borders.org/.

interactive methods and different levels of difficulty. Such goals can be attained using new technologies: online courses are a cost-efficient way to reach out to the world. They can provide modular training that can be adapted and moderated by teachers and experts from the targeted regions, who may also act as role models. Even if, initially, only a few individuals at remote locations receive training, they have the potential to act as examples and to ignite the interest of others, acting as force multipliers to spread disarmament and non-proliferation awareness worldwide

Thirdly, such a large-scale enterprise needs a catalyst, with a wide mandate. While the United Nations has a mandate to provide education on all topics of disarmament and non-proliferation, partnering with other organizations holding the core knowledge on regions or specialized topics would not only enrich the training, but also ensure its accuracy and relevance. The more partners contribute to disarmament and non-proliferation education and the wider the mandate and the knowledge-base, the further the reach and scope of discussions will be, since more and more linkages between interrelated topics would be made.

This is crucial because disarmament and non-proliferation do not exist in a vacuum and evidence shows that interest grows in learning when courses contain material that links the student's area of interest to the main core topic of disarmament and non-proliferation.

This is the route the United Nations Office for Disarmament Affairs chose when it embarked on the development of the Disarmament and Non-proliferation Education Partnership with close to 30 institutions. Together, they developed the Disarmament and Non-Proliferation Education Dashboard,⁵ an

Over 25 institutions, including the United Nations mandated University for Peace, the Vienna Centre for Disarmament and Non-Proliferation and the United Nations Information Service, partnered with UNODA. See www.dnpeducation.org.

online platform that includes a series of modules on a variety of topics related to disarmament and non-proliferation, peace in general and development. In aiming to empower women, participants were not only provided with the opportunity to deepen their understanding of core disarmament and non-proliferation topics, but also on how these issues relate with geopolitics, trade, immigration, refugees, nuclear energy, sustainable development and many other related topics.

This wide range of topics captured the attention of a larger pool of women professionals who had not previously worked in the field of disarmament and non-proliferation. This could also be the case with men, further increasing participants in such educational initiatives. In addition, the involvement of participants from various professional backgrounds and from countries all over the world allows for a richer and more diverse debate.

III. Looking towards disarmament and nonproliferation education for tomorrow

In summary, below are key recommendations for change in taking forward disarmament and non-proliferation education.

1. A more holistic approach

Traditionally, disarmament and non-proliferation education is taught as a separate topic, and the approach favoured by academia and international organizations is topic-based.

Education should not focus on disarmament and non-proliferation as stand-alone topics, but rather as parts of the bigger international development agenda. Furthermore, it should not have a strictly arms control and security-related focus, but also point to the possible peaceful applications of

dual-use technologies and all the good that can come out of the fight against the spread of weapons.

The use of technologies by the Comprehensive Nuclear-Test-Ban Treaty Organization in the course of its work has demonstrated the potential for such technologies, not only to detect nuclear explosions but also earthquakes that can cause tsunamis.⁶

The International Atomic Energy Agency, while playing an important role in the non-proliferation and safe use of nuclear energy, is also at the same time providing technologies that can be used for international development through technical cooperation and the Atoms for Peace initiatives, such as the Programme of Action for Cancer Therapy.⁷

Approaching disarmament and non-proliferation education in such a comprehensive way is consistent with the recently adopted Sustainable Development Goals and demonstrates that different actors and organizations may contribute to several aspects of international development while implementing their mandates.

To prevent a silo-based approach, disarmament and non-proliferation education providers should not only target the general public as the audience and beneficiaries of the training courses, but also promote the awareness of educators in other fields, donors, international organizations, international development agencies and other relevant stakeholders.

Bringing different actors to the discussion would allow the optimization of efforts and to change the paradigms through education, allowing for a change in mindsets.

⁶ See, for example, https://www.ctbto.org/verification-regime/spin-offsfor-disaster-warning-and-science/.

More information about the initiative is available from http://cancer.iaea.org/.

2. A wider audience.

Traditionally, disarmament and non-proliferation education focuses on already well-educated audiences, losing other important sectors of societies that most need education in this area.

It is normal that disarmament and non-proliferation education focuses on deterrence, weaponry and other "hard core" issues related to the topic. After all, such issues have traditionally involved a wide range of political decisions, national and international regulations, rules, procedures and other elements that form the body of international discussions on these issues. A high-level of education is required to follow the debate and engage in an informed exchange on the matter. Likewise, training courses are often offered and planned in a way that only highly educated participants can understand the subject matter of the modules, which is often only provided in English, yet another hurdle for prospective global audiences.

Some significant steps that make disarmament and non-proliferation education more accessible to the public—for example, through projects involving high schools, or raising awareness through art, capturing a wider range of educated audiences—have been taken.

However, disarmament and non-proliferation education has another facet that escapes the attention of service providers: they cannot reach those individuals who do not have a lot of formal education, thus losing a wealth of untapped resources for advocating and multiplying disarmament and non-proliferation ideas. It is essential for future education initiatives to include dedicated modules to sensitize and teach these individuals who can also make a difference in working for peace in general.

For this reason, it is also necessary to include curriculums and syllabuses that are less geared to participants with bachelors, masters and Doctor of Philosophy degrees, but instead are more directed to other lower levels, using less

complex texts, jargon and methodologies. These new courses could be more visual—for example, using more videos, drawings and figures and reducing text to a bare minimum—to be more accessible to a new class of participants that can have an impact on disarmament, non-proliferation and peace issues. Again, adapting disarmament and non-proliferation education to various audiences, with different topics and levels is key to ensure its wide spread.

3. A new range of actors.

Traditionally, disarmament and non-proliferation education or any other peace-related course lack the foundation support all other regular disciplines have, marginalizing it in the eyes of potential interested individuals.

There is a need to build the foundation of disarmament and non-proliferation education from an early age. When compared to, say, mathematics, geography, languages and many other disciplines, disarmament and non-proliferation education or other peace-related issues are never part of the mandatory disciplines, as if they are not integral to our upbringing and part and parcel of our meaning system. The fact is that they are central to the major questions of "non-violence" and "interpersonal conflict resolution" and should be taught early in life and provided as part of mandatory foundational courses from the first grade onwards. This calls for a new paradigm of "non-violence" education and ministries of education, in coordination with institutions such as the United Nations Educational, Scientific and Cultural Organization, should and must respond to this call in order to make education a more holistic instrument for peace. Educating today's youth about disarmament and non-proliferation, and peace in general, is key to shaping the citizens and decision makers of tomorrow and must be a mandatory discipline alongside the others.

III. Conclusion and the way ahead

Disarmament and non-proliferation education is not only a subject for advanced societies, but for all societies no matter their level of development and, as such, education should encompass all prospective audiences that could contribute to peace. An efficient way to ensure the dissemination of disarmament and non-proliferation education is therefore for Member States, academia, international organizations, the private sector and civil society to work hand-in-hand to include disarmament and non-proliferation topics in standard curriculums as early as other disciplines such as mathematics and other mandatory classes are introduced to children, even before high school. This could be coupled with offering online training of different levels, depths and methodologies to interested participants all over the world, free of charge.

It is by changing the current paradigm, by being inclusive and wide open for innovation and daring new approaches, that disarmament and non-proliferation education will take off in a new direction, increase its quality, audience (gender and professions) and reach, and become more practical and effective.

Recommendations of the 2002 United Nations Study on Disarmament and Non-Proliferation Education: Where we stand now and where we should go further, including ideas for the next 10 years

Adlan R. Margoev and Vladimir A. Orlov

This year, the United Nations Study on Disarmament and Non-Proliferation Education¹ is turning 15. This document and the partial implementation of its 34 recommendations have helped move education in this sphere forward. The world has witnessed the appearance of several specialized training

ABOUT THE AUTHORS: Dr. Vladimir A. Orlov is the Founder of PIR Center (Russian Center for Policy Studies), a member of United Nations Secretary-General's Advisory Board on Disarmament Matters, and head of the Center for International Organizations and Global Trends at the Russian Diplomatic Academy. He was consultant to the Group of Governmental Experts in 2001-2002 that produced the Study on disarmament and non-proliferation education. Mr. Adlan Margoev is an MA student in Nonproliferation Studies at the dual-degree programme of the Moscow State Institute of International Relations, Middlebury Institute of International Studies at Monterey, and PIR Center.

centres and textbooks, thanks to the joint efforts of international organizations, Governments, universities and research centres to help address the lack of new specialists and experts on this issue

Equally important is the fact that disarmament and non-proliferation education is now viewed by Governments and civil organizations as a significant and effective instrument for strengthening the nuclear non-proliferation regime and drawing attention from political elites, nuclear industry stakeholders and the general population. This is attested to by the Final Document of the 2010 NPT Review Conference and statements at the Preparatory Committee sessions, including the latest one that took place in Vienna in May 2017.

The 2002 United Nations Study is still valid, as well as all its 34 recommendations.² We do not see a need for its revision or for a new study. In this paper, we discuss the ways to promote and improve education in disarmament and non-proliferation based on the recent experience in this field, as well as suggest a plan of specific projects for the next decade (see annex I) and steps to address three major areas of challenges associated with the Study:

1. Improved reporting by Member States on the implementation of the Study

The authors would like to thank their colleagues at the Center for Global Trends and International Organizations of the Russian Diplomatic Academy, Moscow State Institute of International Relations, and at the PIR Center (Moscow) as well as Prof. William Potter from the James Martin Center for Nonproliferation Studies in Monterey for sharing their ideas and for the brainstorming sessions on the subject of this paper. Proposals and ideas contained in this paper are provided in our personal capacities only, and no other institution or individual is responsible for them.

¹ A/57/124.

² See "Work of the Advisory Board on Disarmament Matters, Report of the Secretary-General" (A/72/185), 21 July 2017.

- 2. Improved implementation of the 34 recommendations of the Study
- 3. Advanced international cooperation in meeting the objectives of disarmament and non-proliferation education and training in a globalized world

I. Improving reporting by Member States on the implementation of the Study

It is a shame that, in 2016, only five Member States (Mexico, Qatar, Spain, Turkmenistan and Ukraine) provided their biennial reports to the Secretary-General pursuant to General Assembly resolution 69/65. In this document, the Assembly requested the Secretary-General to prepare a report reviewing the results of the implementation of the recommendations made in the United Nations Study on disarmament and non-proliferation education and possible new opportunities for promoting disarmament and non-proliferation education.

Even prior to completion of the Study in 2002, the Group of Governmental Experts that was working on the Study from 2001 to 2002³ received official reports by the Governments of 25 States who contributed to the knowledge of existing disarrmament and non-proliferation programmes in the world. Such decline in 15 years raises concern and should be reversed.

Recommendation 31 of the Study, which encourages Member States to designate a focal point for disarmament and non-proliferation education and training and to inform the United Nations Office for Disarmament Affairs (UNODA) on steps taken to implement the 34 recommendations, simply does not work. There was poor reporting by the Member States from

³ One of the co-authors served as consultant to the Group of Governmental Experts throughout the preparation of the Study from 2001 to 2002.

the very beginning⁴ and, by 2016, reporting has declined further. We do not see this situation as acceptable.

In 2010, the United Nations Secretary-General's Advisory Board on Disarmament Matters recommended to the Secretary-General "to encourage Governments to establish robust infrastructures to handle disarmament and non-proliferation studies and to regularly submit reports" in this connection (A/65/228, para. 34 (c)). There was also a recommendation by some members of the Board to reprint the Study and invite the Secretary-General to write a new, updated foreword. In our view, this is exactly what should be done after we mark the fifteenth anniversary of the Study this year. This reprint with the foreword by the new Secretary-General should be produced in the six United Nations official languages and distributed at the United Nations General Assembly in September 2018.⁵

In addition, the new foreword should be distributed at all relevant United Nations gatherings and beyond. International, regional and non-governmental organizations (NGOs), as well as universities that are involved in disarmament and non-proliferation education and that submit their biennial reports to UNODA, should be invited to promote this new foreword by posting it on their respective websites, including it into curriculums and providing it to the national media. This will raise awareness both on the Study and on this issue in general.

II. Improving implementation of the Study

Encouraging the General Assembly to allocate adequate human and financial resources to the task of disarmament and non-proliferation education and training, as contained in Recommendation 34 of the Study, should be re-energized and made specific, with the leadership and co-sponsorship of those like-minded States which have already invested significantly

⁴ Seven biennial reports have been issued so far.

⁵ See A/72/185.

in disarmament and non-proliferation education and training at the national level and have led by example, accumulating significant experience in this area since the Study was produced 15 years ago.

Train-the-trainers and educate-the-educators programmes in disarmament and non-proliferation areas should be further promoted at the national and international levels, in accordance with Recommendation 14 of the Study. UNODA, the United Nations Institute for Training and Research, the United Nations Institute for Disarmament Research, the International Atomic Energy Agency (IAEA), the Organisation for the Prohibition of Chemical Weapons, and the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) Preparatory Commission, are the best-positioned organizations for promoting these programmes and sponsoring them at the international level. Those States that have been traditionally attached to the issue of disarmament and non-proliferation education should be encouraged to re-energize their efforts in this direction.

This applies to national universities and think tanks as well because they can complete such tasks. The educate-the-educators programme in non-proliferation studies in the Russian Federation was established by the PIR Center (Russian Center for Policy Studies), which was founded in 1994 in Moscow. This included regular visits and a series of lectures by PIR Center's associates at most of the Russian universities that focus on international relations and security. In addition, the PIR Center brings professors and research institute staff from all over the country, as well as the post-Soviet states, to Moscow for specialized training courses. Together with other young professionals, public officers and diplomats, they also

^{6 &}quot;Training course for university professors and research institute staff", 2013. Available from http://www.pircenter.org/en/pages/217-training-course-for-university-professors-and-research-institutes-staff-2013.

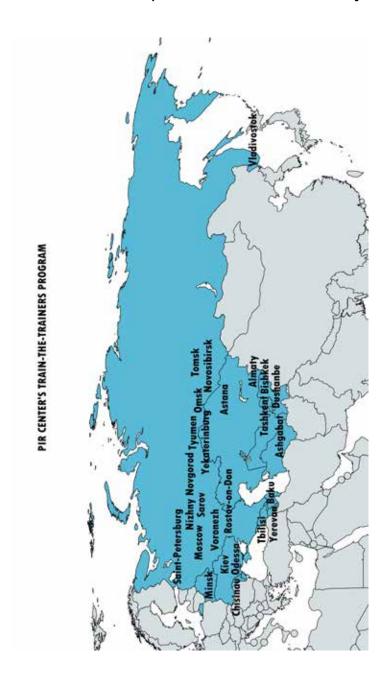
take part in the International School on Global Security,⁷ which has been organized 17 times by the PIR Center on a yearly basis and has shaped a network of more than 700 alumni.⁸ Since all the activities took place in the *Russian* language, these efforts correspond to the next point of this article.

More emphasis should be placed by the United Nations on using languages other than English in teaching disarmament and non-proliferation issues at all levels, from secondary school to post-graduate, in accordance with Recommendation 3 of the Study, and disseminating materials online, in accordance with Recommendation 22. The same applies to regional organizations, academic institutions and NGOs. It is clearly stated in the summary of the Study on disarmament and nonproliferation education that "since most material is in English, translation into other languages is an essential first step". At the moment, there is no shortage of materials in English. At the same time, there is a deficit of materials for teaching in other United Nations languages, as well as in other major languages. This approach should also be based on United Nations General Assembly resolution 69/324 on multilingualism. UNODA online resources should be maintained in the six official United Nations languages, represented equally, in accordance with Recommendation 25.

Due to generally poor reporting on the implementation of the Study, as well as inadequate presence of think tanks, educational and governmental institutions in media, it is

^{7 &}quot;International School on Global Security". Available from http://www.pircenter.org/en/projects/34-international-school-on-globalsecurity.

⁸ According to one of the co-authors, who took part in PIR Center's International School on Global Security in 2015, this is a unique opportunity for young professionals to learn about a variety of security-related issues in Russian in 10 days. It is a fascinating experience to meet renowned officials, diplomats, scholars and experts in the field, as well as colleagues from all over the world who can discuss issues related to non-proliferation, disarmament, cybersecurity and regional security in Russian and share their own experiences with peers.



difficult to assess the scale of activities in languages other than English, both in terms of events and materials. Even a Google search conducted in those languages provided only very modest results, which once again underscores a strong need for collecting all the relevant information at the UNODA Disarmament Education Portal. However, there are initiatives in the field of disarmament and non-proliferation education that are held in languages other than English. They are initiated by entities both from English-speaking and non-English-speaking countries, but for the purposes of the paper, we would like to highlight one initiative in each official United Nations language.

Since 2010, NPSGlobal, an Argentina-based think tank, has organized the Regional Postgraduate Course in Global Security, Disarmament and Non-Proliferation—entirely in *Spanish*, with assistance to those who speak Portuguese. Unfortunately, their web page has recently not been updated as often as their Facebook page; 10 however, they have developed significant expertise in non-proliferation and disarmament over the past decade.

The Arab Institute for Security Studies, established in Jordan in 1995, has held its annual Weapons of Mass Destruction (WMD) and Security Forum nine times in *Arabic*.¹¹ Prior to the 2015 Forum, the Institute made a statement about "the total absence of courses/curriculums dealing with non-proliferation and disarmament in Arab academic institutions".¹²

^{9 &}quot;Regional Postgraduate Course in Global Security, Disarmament and Nonproliferation". Available from http://npsglobal.org/esp/npsglobalmainmenu-26/programas/educacion-para-la-prevencion-y-respuesta/ especializacion-en-desarme-y-no-proliferacion-de-armas-de-destruccionmasiva.html.

¹⁰ Available from https://www.facebook.com/npsglobal/.

Arab Institute for Security Studies, "Meetings: A listing of upcoming conferences and meetings (in addition to old meetings/conferences)". Available from http://acsis.org/meetings.php.

Arab Institute for Security Studies, "Meeting announcement" (2015). Available from http://acsis.org/meetings/nuclear-2015/announce.php.

The Egyptian Council for Foreign Affairs, ¹³ as well as the Chair of its Board, a prominent diplomat, Ambassador Mohamed Shaker, also deserve credit for increasing public awareness about international security and nuclear-related issues.

As for *French*, it turns out that it is more difficult to find relevant materials or events in this language than in Spanish. Unfortunately, the web page of the Center for International Security and Arms Control, which was established in France in 1999, is currently unavailable. If Institut Français des Relations Internationales seems to effectively cover the arms control and non-proliferation agenda. In terms of non-proliferation education, France provides technical education English, to facilitate international cooperation. However, Institut de radioprotection et de sûreté nucléaire, which has expertise in nuclear and radiation risks, provides a brief tutorial in WMD non-proliferation in French.

Regarding the programmes on non-proliferation held in *Chinese*, the work of Carnegie-Tsinghua remains most accessible.¹⁷ Undoubtedly, Chinese academic institutions and think tanks work on these issues; however, lack of coverage of their work in the Internet is obvious.

As an example of best practice in using languages other than English, we could name the CTBT Tutorial, 18 which is provided in all six official United Nations languages, as well

¹³ See http://www.ecfa-egypt.org/.

¹⁴ See http://www.cesim.fr/ (accessed 8 September 2017).

See Institut Français des Relations Internationales, "Dissuasion et proliferation". Available from https://www.ifri.org/fr/recherche/ thematiques-transversales/securite-defense/dissuasion-proliferation.

¹⁶ Institut de radioprotection et de sûreté nucléaire, "Non-prolifération: chimie, biologie, nucléaire". Available from http://non-proliferation.irsn. fr/Pages/default.aspx.

¹⁷ See Carnegie-Tsinghua, "Nonproliferation and Arms Control". Available from http://carnegietsinghua.org/topic/971.

¹⁸ Available from https://ktp.ctbto.org/mod/page/view.php?id=5638.

as in Portuguese. We call for more efforts to promote non-proliferation and disarmament education in multiple languages.

Nuclear engineers, scientists, as well as policymakers from nuclear industry "newcomer" States should receive priority in training, fellowships and awareness programmes, on as wide a geographical basis as possible, in accordance with Recommendation 13 of the Study. The development of the nuclear industry in the "newcomer" States creates an increasing demand for specialists, educated and/or trained in non-proliferation, nuclear security and disarmament areas. While some developed States are closing their nuclear energy programmes, a few dozen developing nations are opting for it. Therefore, nuclear energy specialists are increasingly in demand. The estimates for the demand in nuclear workforce in the emerging nuclear countries differ from State to State, depending on the scale of the planned development and the stage of their respective nuclear programmes. On average, however, each of the newcomer States will require from 6,000 to 8,000 new skilled professionals by 2020.19 The "newcomers" also have a demand for the workforce to be local, which places additional importance on the development of the training programme worldwide. Ignorance or insufficient awareness of nuclear non-proliferation principles in newcomer States may put the nuclear industry and regional or global security at risk. IAEA is ideally placed to address this potential challenge through international non-proliferation training efforts.

As emphasized in Recommendation 17, it is vital for journalists and media representatives to enhance their knowledge about disarmament and non-proliferation. This applies, in particular, to digital media, which plays an

^{10 - -}

Estimates are based on the IAEA reports "Human Resources for Nuclear Power Expansion" (available from https://www.iaea.org/About/Policy/GC/GC54/GC54InfDocuments/English/gc54inf-3-att5_en.pdf) and "Evaluation of Human Resource Needs for a New Nuclear Power Plant: Armenian Case Study" (available from http://www-pub.iaea.org/MTCD/Publications/PDF/TE_1656_Web.pdf).

increasingly important role today. There is a need for a more informed analysis and less propaganda especially in those nations that possess nuclear weapons and have a special responsibility for global peace and stability. It is particularly important that, through responsible media, the young generation is educated about the dangers of WMD and the importance of disarmament and non-proliferation rather than have them internalize mainstream movie stereotypes that may lead the public (and young generation, in particular) to wrong conclusions or a "relaxed" approach to the use of WMD in real life in the twenty-first century.

Training of media professionals on disarmament and nonproliferation values should be prioritized by the United Nations system. UNODA (in partnership with the Department of Public Information and/or other relevant institutions) should be encouraged to call worldwide awards for educators, journalists and writers writing on disarmament and non-proliferation.²⁰ Submissions of works for competition in all six United Nations official languages should be a requirement for such competitions, to avoid an unfortunate situation of availability only in English of most materials considered for journalism international competitions.²¹ The awards should not focus only on publications specializing in security or non-proliferation studies as there should be a more general approach. The consideration of media used by an average citizen should be encouraged. There should be up to five nominations available, including for (1) newspaper journalism; (2) television journalism; (3) radio broadcasting; (4) internet publications;

²⁰ See A/72/185.

It should be recognized that such a task for UNODA will be labour-intensive, particularly as expertise on all United Nations languages will be involved. For this purpose, a combination of additional financial resources for this project from a major philanthropy and an involvement by partner institutions should be a solution to temporarily add human resources for UNODA for disarmament and non-proliferation education and cover costs, in full or in part.

and (5) social networks and blogs. Results of this competition should be announced and prizes awarded in September 2019.

Member States and philanthropic organizations should be invited by UNODA to financially support this one-time competition. Results should be made public and disseminated as widely as possible using United Nations resources, its institutes and its Member States, as well as regional organizations, NGOs and the media. Five winning journalists should become ambassadors for disarmament and non-proliferation education for a 5-year period (2020-2024), joining efforts with other 12 ambassadors for disarmament and non-proliferation education whose selection and functions are further discussed below.

In parallel with the above-mentioned competition, UNODA (in partnership with relevant institutions) should be encouraged to *call a worldwide competition on the "best educators" in the area of disarmament and non-proliferation.*²² There should be 12 nominations available—two in each of the six United Nations official languages: one for institutions and one for individuals.²³ The winners should be announced and prizes awarded in September 2019. Again, Member States and philanthropic organizations should be invited by UNODA to financially support this one-time competition.

Results of this competition should be made public and disseminated as widely as possible using United Nations resources, its institutes and its Member States, as well as regional organizations and NGOs. The six individual winners and six delegates from the winning institutions should become ambassadors for disarmament and non-proliferation education

²² See A/72/185.

²³ It should be recognized that such a task for UNODA will be labor-intensive, particularly as expertise on all UN languages will be involved. For this purpose, a combination of additional financial resources for this project from a major philanthropy and an involvement by partner institutions should be a solution to temporarily add human resources for UNODA for disarmament and non-proliferation education and cover costs, in full or in part.

for the next 5 years (2020-2024) in their respective languages. They should work with the five ambassadors from the global media. The force of the 17 ambassadors for disarmament and non-proliferation education should be decisive in turning the trend from loss of interest in the topic to reviving such interest and improving the implementation of the 34 recommendations of the 2002 Study.

III. Meeting the objectives of disarmament and non-proliferation education and training in a globalized world through advanced international collaboration and cooperation

The objectives of contemporary disarmament and non-proliferation education and training remain the same as they were identified in the Study 15 years ago:²⁴

- (a) To learn *how* to think rather than *what* to think about issues;
- (b) To develop critical thinking skills in an informed citizenry;
- (c) To deepen understanding of the multiple factors at the local, national, regional and global levels that either foster or undermine peace;
- (d) To encourage attitudes and actions that promote peace;
- (e) To convey relevant information on and to foster a responsive attitude to current and future security challenges through the development and widespread availability of improved methodologies and research techniques;
- (f) To bridge political, regional and technological divides by bringing together ideas, concepts, people, groups and institutions to promote concerted international efforts

²⁴ A /57/124, section II.

- towards disarmament, non-proliferation and a peaceful and non-violent world;
- (g) To project at all levels the values of peace, tolerance, non-violence, dialogue and consultation as the basis for interaction among peoples, countries and civilizations.

But how can we best achieve these objectives in today's globalized and interconnected world? In our view, national education programmes of the young generation, in particular at the university level, should be complemented, when possible, with *international cooperation programmes* when disarmament and non-proliferation issues are concerned. The best outcome would be achieved when the new generation of international relations/international security experts, nuclear engineers, journalists, etc. participate in educational or training programmes in WMD non-proliferation and disarmament (arms control) studies with geographically mixed participants, where students from various regions of the globe and from both nuclear-weapon and non-nuclear-weapon States study together.

Such an approach would strongly facilitate the abovementioned objectives of contemporary disarmament and non-proliferation education and training and, in particular, will help develop critical thinking skills in an informed citizenry by encouraging them to learn *how* to think rather than *what* to think about issues.

In order to make such an international cooperation approach more feasible and practical, the steps below should be undertaken as a matter of priority:

1. International certified dual-degree M.A. programmes in disarmament and non-proliferation, with joint participation and collaboration of two or more reputable universities from different countries and with participation of students from many countries should be strongly encouraged. In 2016, the first programme of this kind was established by the Moscow State Institute of International Relations (MGIMO University) and the Middlebury

Institute of International Studies at Monterey (MIIS). Upon the initiative of and in partnership with the PIR Center, the two institutions joined their efforts to develop a programme that would introduce students from all over the world to various approaches regarding non-proliferation studies. Students spent one semester in Moscow and two semesters in Monterey, and dedicated the final semester to undertaking an internship and writing a thesis.²⁵ The first cohort of students, nine individuals from three countries—the United States, the Russian Federation and Mexico—are currently doing their third semester.²⁶ The second one—also consisting of nine individuals, representing the United States, the Russian Federation and China—has just started

²⁵ See "Dual Degree Program in Nonproliferation Studies". Available from http://www.pircenter.org/en/pages/941-dual-degree-program-in-nonproliferation-studies.

²⁶ According to one of the co-authors of the article, who is part of the dual-degree programme, apart from the divergence of views expressed in the programme and the diversity of students representing different countries, another distinctive feature of the programme is a combination of two approaches to teaching prevalent in the Russian Federation and the United States. During the first semester, all the students study in the same group in a very intensive mode—from five to seven hours a day, five days a week. This enables them to both get familiar with most of the necessary subjects on introductory level, and get to know each other and make friends. Upon arrival in Monterey for the second and third semesters, they understand issues regarding disarmament, nonproliferation and cybersecurity, well enough to make an informed decision on what to study further. Since education in Monterey is based on "market principles", they select most of the subjects on their own, do in-depth studies of specific issues, and immerse in the wider community of students and specialists working in the relevant fields. With respect to the professional community, both MGIMO and MIIS are frequently visited by guest lecturers. In addition, around 40 per cent of the first semester in Moscow is based on a series of lectures by visiting professors, invited specifically for the dual-degree programme. These include present and former diplomats, governmental officials, experts and scholars. It is important to note that the lectures are planned and structured as part of regular classes so that various perspectives on disarmament and non-proliferation issues could shape a general, yet detailed picture.

- its first semester in Moscow. The programme is open to applicants of all nationalities and the enrolment process takes place from April to August every year.
- 2 Internships in United Nations entities with special competence disarmament and non-proliferation. in provided to undergraduate and graduate students from all geographical regions of the world, should be expanded, in accordance with Recommendation 24 of the Study. Apart from its regular internship programme, UNODA runs the United Nations Programme of Fellowships on Disarmament. Since 1978, more than 900 officials from over 160 countries have been trained in this programme, which initially lasted for six months and 10 years later was reduced to up to 12 weeks. Every year, 25 fellowships are granted,²⁷ and we believe that the number of participants should be increased.
- 3. Moreover, leading international educational centres, both undergraduate, graduate and post-graduate, should be encouraged to accept junior fellows in the area of disarmament (arms control) and WMD non-proliferation studies *from various geographical regions of the world*. In both cases, it would be best if the junior fellows undertake their programmes in small groups, where fellows from various geographical regions are simultaneously represented.
- 4. Governments should involve the younger generation in their activities related to disarmament and non-proliferation. Recommendation 8 of the Study encouraged Member States to include non-governmental advisers and parliamentarians in their delegations to United Nations disarmament-related meetings; however, under the United Nations Youth Delegates Programme,²⁸ Member States can include young professionals from 18 to 24 years old in their national

²⁷ See "The United Nations Programme of Fellowship on Disarmament" (available from https://www.unog.ch/disarmament/fellowship) and General Assembly resolution 50/81.

²⁸ See https://www.un.org/development/desa/youth/what-we-do/youth-delegate-programme.html.

delegations to the United Nations General Assembly. The selection process is conducted differently in each country. For instance, the Ministry of Foreign Affairs of Mexico holds a nation-wide essay contest every year, with one of several topics being devoted to disarmament and non-proliferation.²⁹ The winners of the contest in this section attend the United Nations General Assembly First Committee session and usually join the Ministry later to continue their work in this field. This brilliant way of training dedicated professionals and helping them to build their career should be adopted by other countries that do not take advantage of the Youth Delegates Programme.

- 5. To bridge the gap between students from one side, and senior experts and officials from the other side, universities, think tanks and international organizations should support student-led research clubs and their initiatives, be it a seminar, a conference or a research project. There should be more events and opportunities for students and senior professionals to engage in discussions on pressing issues and exchange of ideas. CTBTO Executive Secretary Lassina Zerbo, who spares no effort to support the CTBTO Youth Group³⁰ established in 2016, is deservingly called a role model in terms of his interaction with the younger generation.
- 6. In addition, cooperation between student groups as small-scale think tanks should be enhanced. With new technologies, it is almost cost-free. In 2016, the Student Scientific Society at MGIMO University and the Graduate Initiative in Russian Studies³¹ at MIIS launched a series of United States–Russian dialogues on security-related

²⁹ See "Delegados Juveniles ONU". Available from https://www.gob.mx/sre/acciones-y-programas/delegados-juveniles-onu.

³⁰ See https://youthgroup.ctbto.org/youth-group-homepage/.

³¹ See http://sites.miis.edu/russianinitiative/girs-mgimo-dialogue-series/graduate-initiative-in-russian-studies-student-scientific-society-dialogue-series/.

issues. Next steps of the long-term programme envision writing joint papers edited and revised by senior experts in respective fields. This model of cooperation can be adopted by other educational institutions worldwide.

7. In accordance with Recommendation 21 of the Study, distance learning, while not substituting traditional educational methodologies, should be used as a supplemental technique, particularly as it provides cost-efficient access across multiple audiences in various regions of the world and gives unique opportunities for teaching when on-site teaching is not possible.³²

Perhaps, the Nuclear Threat Initiative, in partnership with James Martin Centre for Nonproliferation Studies, provides the most comprehensive tutorial materials on disarmament and non-proliferation.³³ However, those who know little about this field may fail to learn about the tutorials or to develop an interest in these topics. To receive more attention, an online course on non-proliferation and disarmament on such platforms as edX³⁴ or Coursera³⁵ should be developed; currently there is none devoted to these areas of studies. In this regard, the CTBTO profile on iTunes University³⁶ could be highlighted as a move to share their materials with a wider audience. Undoubtedly,

One of the co-authors would like to emphasize here, putting on his professorial hat, that all his experience in teaching non-proliferation studies in MGIMO in Moscow, as well as in eight other universities and schools in 9 different countries, has clearly demonstrated that the conclusion of the 2002 United Nations Study is still valid with respect to the fact that "new technologies, especially the Internet, create unprecedented opportunities in disarmament and non-proliferation education for both the academic audience and the public. The new technologies, however, complement rather than replace traditional education and training" (emphasis added).

³³ Available from http://tutorials.nti.org/.

³⁴ Available from https://www.edx.org/.

³⁵ Available from https://www.coursera.org/.

³⁶ Available from https://www.ctbto.org/specials/ctbto-on-itunes-u/.

- such efforts should be taken by other international organizations, research centres, universities and NGOs.
- 8. In accordance with Recommendation 23 of the Study, and in development of this recommendation, as well as in accordance with para. 25 of the report by the United Nations Secretary-General on the work of his Advisory Board on Disarmament Matters (2010) (A/65/228, section B, p. 6), simulation and role-playing games, including direct and online debates, should receive priority as teaching techniques at the undergraduate and graduate levels when studying disarmament and non-proliferation topics.³⁷ Concluding an international student simulation prior to the 2020 NPT Review Conference might be a good practical opportunity in applying this educational technique for non-proliferation and disarmament education.
- 9. Current experiences with disarmament and non-proliferation education, especially existing international dual-degree programmes, as well as other best practices, new methods and techniques in this field, should be explored at an international symposium that should be convened under the auspices of the United Nations or one of its institutes in 2019, in further development of Recommendation 29 (a), (b) and (c) of the Study, with the guidance and leadership of the above-mentioned 12 ambassadors for disarmament and non-proliferation education.

The international symposium proposed above should be used as a hub for launching an international four-year

³⁷ As the Study put it absolutely correctly in 2002, "a simulation can just as easily take place with participants sitting in a circle as with learners on different continents linked by videoconferencing technology". Progress with information technologies currently makes this approach even much more cost efficient compared to 15 years ago, particularly taking into account that Skype and other relevant technologies can make such distance-learning simulations completely free-of-charge, which is particularly relevant for universities or whole regions of the world where disarmament and non-proliferation studies remain hugely underfunded.

project (2020-2023) connecting six leading universities (or other relevant institutional players in disarmament and non-proliferation education). These would be the universities that would be selected in 2019 as six ambassadors for disarmament and non-proliferation education for a five-year term (2020-2024). These six individuals should serve as moderators from their respective linguistic regions, and the five ambassadors from the global media should provide international coverage, although they could also join as moderators/ facilitators. The essence of this project should be a series of online debates and simulations between the students of different regions of the world on most urgent issues of disarmament and non-proliferation. The conclusions from these simulations should be reported by the ambassadors to the High Representative for Disarmament Affairs in 2024 and made public.

As a result of this global project, six best students (undergraduates or graduates) in disarmament and non-proliferation studies, who would perform the best during the simulations and debates, should be selected and announced in 2024 as new ambassadors for disarmament and non-proliferation education for the next five-year period (2025-2029).

With this, the 17 ambassadors selected in 2019 for five years will pass the richness of experience as well as their own ideas to the new, young generation, not only symbolically, but in practice. The year 2024 will be a transition year for sharing such experience and for passing it from the most experienced to the young. Starting from 2025, it will be up to the young and bright students or former students to provide their vision on this matter and to take the lead in promoting disarmament and non-proliferation education in their respective regions, as well as globally.

Annex

PLAN FOR PROMOTING DISARMAMENT AND NONPROLIFERATION EDUCATION

Student ambassadors on disarmament and nonproliferation take the lead 2029 in promoting education and training in this area 2028 2027 and nonproliferation are selected from Student ambassadors on disarmament the winners of Online Debates Project 2026 the "best educators" in the area of disarmament and nonproliferation - among universities the "best educators" in the area of disarmament and nonproliferation - among individuals 2025 Reprinting the Study (A/57/124) and inviting the Secretary-General to write a new, updated foreword. International symposium on lessons learned from international educational "Peer ambassadors" on disarmament and nonproliferation education are Transition selected from the winners in "best educators" and "best practices in joint group) the best practices in journalism writing on disarmament and nonproliferation period 2024 disarmament and nonproliferation education Five-year term for "peer ambassadors" on journalism" nominations in the 2019 competition programs on disarmament and nonproliferation 2023 Four-year International Online Debates on Disarmament and Nonproliferation Project 2022 A world-wide competition on: 2021 2020 2019 2018 2017

2030

SHOPS MEETINGS PRESENTATIONS PAPERS SE S SEMINARS STATEMENTS SYMPOSIA WORKSH SHOPS MEETINGS PRESENTATIONS PAPERS SE S SEMINARS STATEMENTS SYMPOSIA WORKSH SHOPS MEETINGS PRESENTATIONS PAPERS SE S SEMINARS STATEMENTS SYMPOSIA WORKSH SHOPS MEETINGS PRESENTATIONS PAPERS SE S SEMINARS STATEMENTS SYMPOSIA WORKSH SHOPS MEETINGS PRESENTATIONS PAPERS SE S SEMINARS STATEMENTS SYMPOSIA WORKSH SHOPS MEETINGS PRESENTATIONS PAPERS SE S SEMINARS STATEMENTS SYM KSH SHOPS MEETINGS PRESENTAT SEMINARS STATEMENTS SYM 9 789211 422375

SHOPS MEETINGS PRESENTATIONS PAPERS SE

eminars statements symposia workshoi