United Nations Secretary-General Kofi Annan has observed correctly 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. In part because of a fixation on quick solutions to immediate crises, neither national governments nor international organizations invest adequately in long-term programmes of disarmament and non-proliferation training.

This shortcoming is accentuated at the start of the new millennium by the growth of two post-Cold War disarmament challenges—ignorance and complacency. These tendencies find expression in most national parliaments, which remain woefully uneducated about disarmament and non-proliferation issues and generally are unprepared to exercise the political will or to allocate the resources commensurate to the danger. Today, more often than not, parliamentarians and their constituents are preoccupied with pressing domestic issues, and display scant interest in international matters that are not directly related to economics. For many, this disposition is reinforced by the mistaken perception that with the end of the Cold War and the diminution of the traditional danger of superpower nuclear conflict, there are no longer any real nuclear dangers.

Also disturbing is the very limited awareness of disarmament and non-proliferation issues on the part of otherwise well-educated citizens. Although this low knowledge base is deplorable, it also is understandable given the general absence of opportunities for study of the subject. Few, if any, high schools have curricula that expose students to issues of disarmament or weapons proliferation and strategies for their control, and the possibility for university training is not much better. The very modest progress that has been made in the sphere of disarmament education at the university level is apparent in the July 1999 Report of the International Association of University Presidents/United Nations Commission on Disarmament Education, Conflict Resolution and Peace. The picture is even more bleak in the realm of non-proliferation education where one can find only two universities in the world that offer a graduate concentration in the field. In short, at a time when there is a pressing need for new thinking about disarmament and non-proliferation matters, there are few venues available for training the next generation of specialists or even for introducing our future leaders to the subjects.

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What is the subject? Who is the audience?

‘Disarmament education’ means very different things to different audiences and may connote everything from campaigns to raise the general public’s awareness of broad disarmament challenges to formal programmes of advanced graduate study of weapons of mass destruction proliferation. As Betty Reardon points out in a very useful review of ‘peace education’ broadly defined, the field has often encompassed formal university courses of study on conflict resolution, world order, war prevention, multicultural studies, non-violence, nuclear education, and disarmament education. As other contributors to this volume describe in detail, there is a substantial public education and outreach dimension to peace and disarmament pedagogy, which is as diffuse in its definition of the subject as that of its academic counterpart. Although differing widely in its focus from country to country and regionally, public education, and especially mass peace campaigns, typically have focused less on the issue of horizontal spread of weapons of mass destruction and more on their vertical proliferation, namely the arms race among the extant nuclear-weapon states. The target audiences for such messages often are much broader than that for formal education, and may include the public-at-large or the so-called informed or attentive public. On occasion, however, public education efforts also may focus more narrowly on policy-makers in the legislative and executive branches of government. Not surprisingly, public education in the field of disarmament and non-proliferation has tended to emphasize advocacy over explanation.

It is not my intent to argue the merits of one or another definition of the field or the priority to attach to alternative target audiences. Because of my greater familiarity with the state of disarmament and non-proliferation education of an academic nature, however, this essay’s recommendations will focus on the more formal variety of education.

Education as a disarmament and non-proliferation strategy

Using education as a disarmament and non-proliferation strategy entails a combination of traditional and innovative teaching techniques to convey information, enhance analytical thinking and otherwise facilitate receptivity to new views about disarmament and non-proliferation. Different pedagogical approaches include face-to-face classroom lectures, small group discussion and research seminars, as well as simulations in which students assume the roles of ‘real world’ policy-makers and negotiators. New information and communication technologies also need to be exploited for the purpose of expanding disarmament and non-proliferation education.

What follows is a preliminary and partial list of recommendations for enhancing the role of disarmament and non-proliferation education. The specific recommendations draw upon both...
traditional and more contemporary pedagogical approaches. They also suggest the need for a number of changes of a legislative and administrative nature.

FACILITATE ACCESS TO INFORMATION ON DISARMAMENT AND NON-PROLIFERATION EDUCATION

A multitude of United Nations bodies, NGOs, and private and public institutions of higher education are engaged in various forms of disarmament and non-proliferation education. No current and readily accessible compilation of information on the subject, however, exists. The United Nations Institute for Disarmament Research (UNIDIR) or the United Nations Department for Disarmament Affairs (DDA), perhaps in collaboration with a NGO, might usefully compile such a compendium. Ideally, it would be available online and would be updated periodically.

CREATE AN ONLINE, MULTILINGUAL DISARMAMENT AND NON-PROLIFERATION INFORMATION CLEARINGHOUSE

The provision of disarmament and non-proliferation education for both an academic audience and the general public would be facilitated by the creation of a ‘one-stop information service’ or clearinghouse. A model for such an online service for disarmament and non-proliferation information is the International Relations and Security Network (ISN), a co-operative project of the Swiss government and the Zurich-based Center for Security Studies and Conflict Research. Among the services offered by ISN that would be useful to emulate in an online disarmament and non-proliferation clearinghouse are an annotated links library, a search tool, a selection of resources on world affairs, specialized fact databases, and education modules in the field of security policy and international relations. Provision of factual information in multiple languages would be particularly valuable in many regions currently lacking access to timely information on disarmament and non-proliferation topics.

DEVELOP AND DISSEMINATE CURRICULUM MATERIALS FOR HIGH SCHOOLS

Disarmament and non-proliferation issues rarely are part of high school curricula. Two important reasons for this shortcoming are the paucity of relevant curriculum modules and the lack of familiarity with disarmament and non-proliferation issues by potential instructors. The United Nations DDA and/or the Department of Public Information, in partnership with one or more NGOs, should develop modules on disarmament and non-proliferation for high school use. Among academic organizations which could be of assistance to the United Nations in this regard are the Academic Council on the United Nations System, the International Association of University Presidents Commission on Disarmament Education, Conflict Resolution and Peace, and the Stanford Program on International and Cross-Cultural Education. In addition, a multinational programme of training seminars for selected high school instructors should be organized. The Center for Nonproliferation Studies at the Monterey Institute of International Studies has experience in this regard with respect to non-proliferation issues and has initiated a high school outreach project to provide curricula and instructional materials on WMD non-proliferation to secondary schools and to train teachers in the use of these materials. Currently it offers week-long training sessions involving student-teacher teams from over a dozen high schools in five states of the United States and four Russian nuclear cities.
Foster participatory learning

One of the most important principles highlighted in the prescient Final Document of the 1980 World Congress on Disarmament Education is the need to utilize ‘the most imaginative education methods, particularly those of participatory learning ...’. As the Final Document notes, this approach to education is problem-oriented and ‘aims at teaching how to think about disarmament rather than what to think about it.’

My experience in nearly three decades of university teaching is that by far the most effective means to encourage participatory learning is through the use of simulation exercises in which students adopt the roles of different national representatives and policy-makers. I am always amazed, for example, at the ease and speed with which American students adopt credible Russian perspectives in a semester-long simulation of American-Russian START III negotiations, and the similar facility displayed by Russian, Chinese and other international students in portraying negotiators from the United States. More often than not, the simulation participants experience the mind-expanding process in which they begin to see the world through the eyes of others. Perhaps what is needed is for ‘real world’ foreign and defence policy-makers periodically also to have the opportunity to switch roles in a simulation context and, at least for a short period of time, view the problems of international peace and security from the vantage point of an adversary or reluctant ally. Given the lack of recent activity in the Conference on Disarmament, it might be the ideal venue for such a simulation to take place.

Establish an international fund for graduate training

A tremendous gap exists between government statements about the dangers of weapons of mass destruction and the paucity of national funds allocated to train the next generation of specialists on disarmament and non-proliferation. One useful step that could be taken to remedy this situation in the United States would be passage of legislation to create a National Non-proliferation Education Act. Such legislation, perhaps modelled after the National Defense Education Act, would provide fellowships to American and foreign graduate students for advanced training in the field. Although it might be desirable to fund similar legislation with a broader disarmament education mandate, it would appear to be infeasible at the moment given the current orientation of the United States Congress. Other national legislatures, however, might be more receptive to the concept. Alternatively, a private organization or foundation could accomplish the same objective by establishing a scholarship fund. Interest from a US$10 million fund, for example, could support the training of several dozen new professionals each year.

Expand on-the-job training

An important educational supplement to formal classroom training is on-the-job training, which may take place at research centres on a campus or at international organizations, national governmental agencies or NGOs. Such training, under the mentorship of an experienced professional, will vary widely depending upon the organization in question, and may include such tasks as background research, data collection and analysis, development of course materials, reporting on conferences...
and interagency meetings, and performance of routine office activities. What all meaningful on-the-job training programmes have in common is provision of opportunities for students/interns to apply their classroom knowledge to practical problems and to acquire ‘real-world’ experience of interest to prospective employers. At the Monterey Institute of International Studies, for example, each year typically fifty graduate students spend fifteen to twenty hours per week on different non-proliferation projects under the supervision of a senior staff member from the Center for Nonproliferation Studies. Approximately ten of these students annually also are selected for six- to nine-month paid internships at major international organizations with non-proliferation responsibilities (e.g., the International Atomic Energy Agency, the Organisation for the Prohibition of Chemical Weapons, DDA, the Conference on Disarmament, and the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean) and with the United States Department of Defense’s Cooperative Threat Reduction Program. Upon completion of these internships, the individuals are exceptionally marketable and are well positioned to make the transition from graduate student to young professionals in the non-proliferation field.

**Utilize new technologies to provide distance learning**

A tremendous opportunity is available to utilize new information and communication technologies for disarmament and non-proliferation distance learning, including the development and dissemination globally of real-time, interactive courses, short course modules, and related course materials tailored to different age groups. Although distance learning should not be thought of as a substitute for in-classroom training, it allows access to new audiences and non-traditional students. New Internet technology and tools, including electronic mail (e-mail), e-mail listservs, chat groups, desktop video conferencing, and the World Wide Web provide nearly instantaneous access to vast archives of information, as well as a variety of Internet-mediated learning activities. These tools can be utilized for both highly interactive education activities (e.g., online courses with desktop video conferencing) or more modest and lower interactive pedagogy (e.g., posting lists of Internet resources for a specific course).

The United Nations has a responsibility to join the technological revolution and to exploit it for pedagogical purposes. Greater efforts should be made to tap the enormous financial resources of private entrepreneurs in information and communications technology to support disarmament and non-proliferation distance learning activities under the auspices of DDA, UNIDIR or conceivably other United Nations entities.

**Build global communities of disarmament and non-proliferation specialists**

Development of a global disarmament and non-proliferation culture cannot be accomplished easily or quickly. Nor will an influx of money alone solve the problem. What is required is a sustained educational effort as part of a broader strategy to build communities of independent disarmament and non-proliferation specialists. This strategy has governmental, international organizational and non-governmental components and requires for its success a partnership among representatives from each of these communities in pursuit of certain common objectives.

Effective community-building must be sustained over an extended period of time, a task that often is difficult for governments or international organizations to accomplish. It is particularly important
for trainers not to introduce their charges to new careers and then leave them stranded with little prospect of meaningful long-term employment in the disarmament and non-proliferation field. One of the best means to reduce the likelihood of this outcome is to build local communities of specialists who, by virtue of their critical mass, can better maintain activities without permanent foreign assistance. Nevertheless, a fundamental obstacle to community-building in many countries remains the difficulty of attracting young people to the field when there are at best dim employment opportunities. The long-term solution to this dilemma, which will require a significant shift in the attitudes of both educators and national policy-makers, is, as Colin Archer points out, ‘to situate disarmament more fully as a legitimate and indeed essential element within programmes of study in international relations, politics, and training for life in the diplomatic community’. 6

TRAIN THE TRAINERS

A useful means to build communities of disarmament and non-proliferation specialists is to train the trainers. This approach recognizes the significant multiplier effect that can be achieved by targeting professors/teachers for disarmament and non-proliferation training. Once trained, these individuals can introduce the subject to a much larger audience through their courses.

Illustrative of this training approach, and one that could usefully be applied to many other regions is the ‘Train the Trainers’ project developed by the East Asia Nonproliferation Program at the Center for Nonproliferation Studies. This project engages Chinese professors from over one dozen different universities and institutes in a two-week workshop to familiarize them with a Chinese language non-proliferation and arms control ‘course-in-a-box’. Participants also are provided with additional teaching materials in Chinese and English that can be used to develop new courses or incorporated as non-proliferation modules in existing courses. Workshop alumni subsequently receive updated material, electronic mailing lists, and on-site visits from Center staff that combine substantive presentations with evaluations and recommendations for course improvements. By training the trainers, the project reaches well beyond the current, government-based non-proliferation community in China and helps to develop the next generation of non-proliferation specialists in that region.

IMPROVE LIAISON AMONG RELEVANT UNITED NATIONS BODIES

The issue of disarmament and non-proliferation education cuts across a number of different United Nations organizations, departments and programmes including UNESCO, UNIDIR, DDA, the Department of Public Information, the United Nations University, the University for Peace and the Disarmament Fellowship Programme. These different United Nations bodies and programmes, in turn, maintain relationships with a variety of educational institutions and NGOs in the disarmament field. However, there is insufficient routine consultation and co-ordination among the different United Nations entities with regard to disarmament and non-proliferation education. Co-ordination among these bodies might be improved if each had a staff member designated as responsible for the subject and if the representatives met periodically as an interdepartmental or interagency working group. 7
Policy action

At last year’s fifty-fifth session of the First Committee, the General Assembly adopted a resolution sponsored by Mexico and eleven other nations to conduct a two-year United Nations study on disarmament and non-proliferation education. More specifically, that resolution requests the Secretary-General, with the assistance of a group of qualified experts:

(a) To define contemporary disarmament and non-proliferation education and training, taking into account the need to promote a culture of non-violence and peace;

(b) To assess the current situation of disarmament and non-proliferation education and training at the primary, secondary, university and postgraduate levels of education, in all regions of the world;

(c) To recommend ways to promote education and training in disarmament and non-proliferation at all levels of formal and informal education, in particular the training of educators, parliamentarians, municipal leaders, military officers and government officials;

(d) To examine ways to utilize more fully evolving pedagogic methods, particularly the revolution in information and communications technology, including distance learning, to enhance efforts in disarmament education and training at all levels, in the developed and the developing world;

(e) To recommend ways in which organizations of the United Nations system with special competence in disarmament or education or both can harmonize and coordinate their efforts in disarmament and non-proliferation education;

(f) To devise ways to introduce disarmament and non-proliferation education into post-conflict situations as a contribution to peace-building … .

Pursuant to the resolution, a ten-nation group of experts has been designated by the Secretary-General, and the first meeting of the Experts Group was held in New York in April 2001. Mexican Foreign Ministry Under-Secretary Miguel Marín Bosch was selected to chair the expert body.

Given its mandate, the new United Nations study has the potential to raise the salience of the issue of disarmament and non-proliferation education and to generate a set of concrete, practical recommendations. The first meeting of the group was promising in this regard. It remains to be seen, however, whether or not the new proposals will resonate any more loudly in the international community than the excellent package of recommendations stemming from the 1980 World Congress on Disarmament Education. Regrettably, the absence from the Experts Group of the five nuclear-weapon states recognized by the NPT will make it harder to gain political support internationally to implement the group’s recommendations. As a consequence, even more responsibility is likely to fall upon NGOs to move the disarmament and non-proliferation education process forward.

In short, the challenge is great, as is the opportunity. As Secretary-General Annan has noted, ‘education is the most effective form of defence spending …’. Disarmament and non-proliferation education has the potential to yield a profit beyond calculation.
Notes

1 Quoted in ‘Secretary-General in Address to “Learning Never Ends” Colloquium, Calls Education Investment Which Yields Highest Profit’, press release SG/SM/7125, 10 September 1999, p. 2.


3 Although a number of universities offer one or several courses on non-proliferation, only the Monterey Institute of International Studies and the Moscow Engineering Physics Institute (MEPhI) provide a graduate concentration in the field. The Monterey programme offers a Masters Degree in International Policy Studies with a Certificate in Nonproliferation Studies. The MEPhI programme leads to a Masters Degree in Technical Physics with a specialization in Material Protection, Control and Accountancy.


6 ‘NGO Committee Presentation on Disarmament Education’, Remarks prepared for the Secretary-General’s Advisory Board on Disarmament Matters, Geneva, 5 July 2000.

7 Colin Archer also cites the value of an interdepartmental working group within the United Nations system in ‘NGO Committee Presentation on Disarmament Education’, ibid.


9 The nations invited to participate on the Experts Group are Egypt, Hungary, India, Japan, Mexico, New Zealand, Peru, Poland, Senegal and Sweden.

10 ‘Secretary-General in Address to “Learning Never Ends” Colloquium, Calls Education Investment Which Yields Highest Profit,’ op. cit., p. 2.