Playing Games with Nuclear Bombs: Developing Future-Oriented Foreign Simulations

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Author Biographies

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Instructional Challenge

Preventing the proliferation of nuclear weapons stands as perhaps the critical challenge to the security of the global community. For this reason, the topic is central to instruction in the fields of international affairs, political science, and foreign policy. Learning objectives on this topic include developing an understanding of how countries have confronted the issue in the past and why progress has been so difficult, and designing new initiatives moving forward.

Solution

In support of these objectives, we developed a "future-oriented" foreign policy simulation. Simulations grounded in historical events have clear and demonstrated benefits that extend beyond teaching history; they also encourage students to think creatively about the present.[1] We define future-oriented foreign policy simulations as those in which students adopt the contemporary interests of countries in negotiations that are on the global agenda but that have not yet occurred. In this way, students obtain experience confronting real-world foreign policy issues that the international community has yet to effectively address.

Overview

Our simulation models the upcoming Review Conference for the Treaty on the Non-Proliferation of Nuclear Weapons. The conference has been convened every five years since 1975 in order for governments to review the success of previous initiatives and to establish a common framework for realizing the principles, objectives, and full implementation of the Nuclear Non-Proliferation Treaty (NPT). The primary goal at each conference is to produce an updated consensus document outlining national commitments and responsibilities with respect to advancing the global nuclear-nonproliferation agenda. Production of this consensus document is the focus of our simulation.

We developed a 14-country simulation in which student teams adopt the role of national delegations attending the next scheduled NPT conference.[2] The class receives a briefing packet containing background material on the purposes of the conference and a reference list for self-study. Delegations receive confidential memos containing information about their assigned country including their government's activities during

[1] For example, *Reacting to the Past* role-playing is proven and effective pedagogy across academic disciplines. https://reacting.barnard.edu

[2] The simulation is based on similar efforts at Stanford University. A chief challenge in designing the simulation for our instructional environment was adapting the structure, materials, and goals to fit a smaller class size with fewer resources. Many thanks to Harold Trinkunas for supplying the Stanford game manual for reference.

previous review conferences, their country's national interests on each of the specific issues that will comprise the upcoming negotiations, and explicit directives outlining each delegation's objectives at the conference.

This confidential memo is critical to our purposes in that it connects the student experience to the real-world challenges inherent to these negotiations. We developed the memos from the expected positions of countries entering the next NPT conference.[3] Because students are tasked to pursue the authentic (often conflicting) national interests of real governments in contemporary negotiations, they are, in essence, confronting the same set of challenges that the global community is itself attempting to resolve.

Simulation Structure

The simulation is deployed at the end of the semester and provides an opportunity to integrate course material into a focused and immersive experience. The simulation also builds on an earlier classroom exercise on the historical formation of the NPT, allowing students to link challenges of past treaty design to contemporary debates.[4] The agenda for the simulation mirrors the structure of actual nonproliferation negotiations. National delegations first develop memorandums defining their specific goals for the NPT conference and then present these at plenary sessions. Delegation members are subsequently divided into working groups to confront specific issues that are critical to the success of the conference - i.e., nuclear disarmament, regional security concerns including Iran and North Korea, and the establishment of a "nuclear free zone" in the Middle East.

Delegations pursue their government's objectives (provided in the briefing packet) through this working-group mechanism with the goal of simultaneously protecting their national interests and producing cross-national consensus on each topic. Working group participants then reconvene with their national delegations, and the conference as a whole attempts to compile working-group proposals into a universal consensus document outlining new national commitments and responsibilities consistent with the NPT. Finally, country delegations vote on whether to approve the consensus document based on their national interests.

Table 1: Countries, Committees, and Schedule

Country Delegations	**Committee Assignments**	**Class Schedule**
Saudi Arabia	Nuclear Disarmament	1. Introduction to simulation
Brazil	Regional Issues	2. Country meetings
China	Middle East NWFZ	3. Head of state presentations
South Korea		4. Country presentations
North Korea (observer)		5. Committee meetings
Egypt		6. Debate and vote
United States of America		7. Post-simulation discussion
France		
Iran		
Japan		
Nigeria		
Norway		
Russia		
Australia		

[3] Reference materials included the United Nations archives of Preparatory Committee reports and publicly available information from national government web sites.
[4] See Alex Wallerstein's NPT Classroom Simulation: https://highlynriched.com/downloads/nuclear-non-proliferation-treaty-classroom-simulation/.

Designing Failure

Given the obvious connection between progress on the issue of nonproliferation and global security, students are often frustrated when they come to understand that the initial hopes for the NPT have yet to be fully realized. Policy experts and academics agree that the location of this failing rests in the fact that countries have sharply divergent interests on the issues that strike at the core of their perceptions of national security. In a traditional classroom setting, students inevitably push back against this analysis and argue that, nonetheless, governments should come together for the "common good" of the global community and fully implement the initial aspirations of the NPT.

To help students develop a deeper understanding of the inherent, real-world challenges attached to nonproliferation we selected a sub-set of countries for our simulation that represent divergent positions on each of the three main working-group topics for the upcoming conference. This places delegations in authentic conflicts of interests. For example, while the United States and Australia agree that sanctions against North Korea are appropriate, they disagree on the broader issue of eliminating nuclear weapons all together. Alternatively, while Iran and Saudi Arabia stand together, and against the United States, on the Israeli nuclear program, the Saudi government is deeply distrustful of Iranian nuclear ambitions.

In this way, we have deliberately designed a simulation to produce tension between delegations that reflect real-world national aspirations during NPT negotiations. In turn, this places students in the difficult position of having to choose between their own national interests and the "common good" they hope and believe that the international community should aspire to.

Assessment

Student assessment in the simulation is based on participation across oral and written assignments. Delegations are first tasked with writing a pre-conference working paper detailing their country goals, strategies, and potential obstacles for each committee assignment (see Table 1). Each delegation gives a private presentation to the instructor (playing their head of state) to illicit feedback before presenting their country position to the full conference. Delegations then send representatives to each of the committee areas to negotiate and build treaty language and the conference reconvenes to debate and discuss the consensus document. Finally, the class engages in an out-of-simulation discussion on goals and negotiating strategies, recommendations for future work, and what lessons and connections can be drawn from the simulation to class concepts and broader nonproliferation policy. Each student is tasked with writing a final memo reflecting and building on this discussion.

Student Experience

The initial roll-out for the simulation occurred in the fall semester of 2020. Due to COVID-19, the simulation was conducted online. Nonetheless, evaluations were overwhelmingly positive. For example, over 90% of students rated the class 5/5 for stimulating interest, encouraging independent/critical thinking, organization, and facilitating discussion. Comments from open-ended evaluations confirmed these results. Students noted high levels of engagement, including that "The simulations were a great way to learn materials while also having fun." Students also appreciated that the simulation provided "a variety of students a leadership role." The simulation encouraged self-directed learning, including "a fair amount of research in order to form my own opinions." Finally, the negotiating and policy-writing components of the game delivered practical experience, and students valued the opportunity to engage a "hands-on" experience "about how the real-world institutions carry out their duties regarding nuclear politics."