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A Teaching Roundtable

Teaching Roundtable on Games and Simulations in IR

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Introduction by Barış Kesgin, Elon University

The essays in this teaching roundtable will help instructors (re)commit to and (re)envision their use of games and simulations in their courses. The conversation is timely, as many faculty find themselves having to rethink their course designs in the midst of a major disruption to their classes caused by the COVID-19 pandemic.

The authors present thoughtful and practical suggestions about how to integrate games and simulations and also share their own experiences. Zoltan Feher and Frank Sobchak begin their essay with reference to their methods of preparing and including effective games and simulations; Nakissa Jahanbani highlights how one can construct briefing exercises as games and simulations and run a simulation within the time constraints of an online class session; while Elizabeth Mendenhall's essay offers an excellent first-hand account of the adaptability of faculty members that circumstances demand.

An Overview of the Essays

Feher and Sobchak start their essay with the observation that "the baseline expectation of how learning would occur" has changed since their own undergraduate experiences. They argue that games and simulations can provide "insight into real-world decision-making processes" and offer a more direct bridge between theory and practice than typical lectures. Feher and Sobchak's discussion also highlights some "key ingredients" to creating effective games and simulations. In brief, they identify three key components to an effective simulation: students' good-faith role-playing, the addition of insufficient information and time constraints that can stoke interpersonal conflict and debate, and the creation of "an all-knowing control cell" (that is, a professor and/or teaching assistants) that can script the scenario and answer questions as they arise. This essay is useful for its account of the authors' experience in running multiple simulations: the Cuban Missile Crisis, the South China Sea crisis (a maritime crisis prompted by an accident that involved the U.S. navy and a Kenyan cargo carrying Chinese toxic waste), and a UN-sponsored climate change conference, a larger simulation ("SIMULEX") for the International Security Studies Program at the Fletcher School. Feher and Sobchak conclude that "games and simulations [will] help prepare the next generation [of leaders] to do their best even in the worst circumstances."

Jahanbani's essay presents a focused discussion of how to use simulations in terrorism studies. It is also useful for an illustration of running simulations involving a briefing exercise in an online course that uses case-study based teaching. Jahanbani argues for the importance of debriefings and offers a helpful overview of the utility of simulations with direct references to the relevant literature. She titles her own simulation the "Domestic Designation Briefing," in which students are tasked with determining whether an assigned group should be added to their hypothetical task force's list of domestic terrorist organization designations. As Jahanbani notes, this simulation is easily adaptable for in-person classes, and, as she reminds readers, such simulations can motivate students "to invest in the learning material."

Mendenhall's contribution to the roundtable will resonate with many readers for its attempts to integrate the games and simulation discussion here into a much broader context. This essay blends together the many realities of a faculty member's professional life and demonstrates how one's interest in games and simulations (which is aptly deemed as time-demanding) can serve other professional goals as well. Mendenhall shows how games and simulations can derive from and inform one's research and university service, thus playing a role in tenure-track success. Furthermore, Mendenhall's essay is interesting in that it was designed to correspond with a real-world negotiation—the fourth session of the Biodiversity Beyond National Jurisdiction negotiations. Unfortunately, this course (and the simulation) ran in Spring 2020 when many colleges and universities had to transition to online teaching abruptly. One of the key contributions of this piece, then, becomes an examination of how in games and simulations faculty have to adapt—in this instance, with some significant changes because the real-life negotiations were postponed. The author's frank and transparent discussion of how this experience unfolded will be especially helpful to those who are still making pandemic-related changes as policies change throughout the semester and to those who face future disruptions of this sort. In addition, Mendenhall's essay also reflects on how to make simulations interesting to a diverse group of students with different majors, which invites the reader to think about designing games and simulations with a broad appeal.

Food For Thought: Logistics of Games and Simulations

The three essays in this roundtable are timely and helpful for scholars who are thinking about using games and simulations or for those who are pondering their course designs more broadly. The authors in their respective pieces suggest some further points of contemplation based on their own experiences, but among many other takeaways from this roundtable, I would like to suggest a few further points.

One important consideration is one's level of involvement in the game or simulation (Feher and Sobchak). The instructor's role may range from no involvement (being a 'fly on the wall') to acting as a rule enforcer to an active player. The choice between these degrees of involvement may well depend on the number of instructors involved; in a small class with no teaching assistants, the faculty member has to reflect carefully on the projected demands of a game or simulation. The presence of more instructors (either other faculty or teaching assistants) allows for more involvement. It is best to clearly draw these lines for all involved (students and instructors alike) before the game or simulation begins.

Another important element of game and simulation design is to determine the allowable means of communication for students. In an age of various such means (from text messages to abundant social media messaging to Slack and to Zoom…), students need to know what forms of communication are permissible. Can a student reach out to another via the chat box on Zoom while the activity continues? If the activity continues past a single class time, can students communicate when the class is not in session? The "right" answer to such questions will vary depending on one's pedagogical goals, but as Feher and Sobchak note, limitations in information-sharing may create productive tensions in games and simulations.

It is also worth highlighting one very helpful recommendation from Feher and Sobchak's essay: that when possible, instructors enforce a pause between rounds "to reset the simulation." This, they share, allows their "control cell" members to communicate with each other, evaluate the simulation at regular intervals, and thus provide the students with any important updates based on these conversations. Depending on the nature of one's game or simulation and the time available, such a scheduled pause will be very helpful. Alternatively, the faculty may simply want to factor this in and resort to enforcing a pause in their games or simulations as necessary.

Meanwhile, Jahanbani's essay prompts readers to think about how case studies may inspire or be incorporated into games and simulations. Jahanbani envisions her briefing exercises as debates, emulating case-study exercises. One may think about these in written or oral reflections before, during, or after games and simulations. This essay also serves to remind the reader that effective games and simulations require debriefings following the active learning experience.

Finally, one of the key takeaways from Mendenhall's contribution should be that games and simulations in the classroom are doable in the context of one's research program (and even during abrupt transitions). Indeed, teaching and research feed on each other; whereas games and simulations may demand more time than a lecture or group discussion in the short term, carefully designed games and simulations may well align with one's research endeavors. Further, as Mendenhall notes, one's pedagogical commitment to games and simulations and to active learning more generally, along with a correspondence between teaching and research, will serve scholars well in their tenure and/or promotion prospects at any higher education institution and certainly in liberal arts colleges. Most importantly, as all the essayists argue, games and simulations will connect faculty members with the students in their classes.

Conclusion

After reading the three essays, I revisited my games and simulations folder nearby. One article that is worth sharing with readers who they may be thinking about games and simulations is Timothy Wedig's "Getting the Most from Classroom Simulations: Strategies for Maximizing Learning Outcomes."[1] In this 2010 paper, Wedig presents a model ("decision stages") for effective games and simulations. The design, active, and post-simulation phases are already implied in the entries

[1] Timothy Wedig, "Getting the Most from Classroom Simulations," *PS: Political Science and Politics* 43:3 (2010): 547-555.

in this roundtable. Wedig offers a concrete framework for introduce games and simulations in classes (if they are not already there), and in ways that underscore and sometimes mirror the essays in this roundtable, Wedig outlines the various choices an instructor must make in each of those decisional stages. Such structured thinking about one's pedagogical goals and the means with which to attain them will be helpful in ensuring games or simulations are just as rewarding for students as they are for the instructors. The three essays in the roundtable, which outline the authors' own experiences with simulations and games and also discuss the relevant literature, invite faculty members to recommit to games and simulations in their classes while offering helpful guidelines for doing so.

Participants:

Barış Kesgin is Associate Professor Political Science at Elon University (North Carolina). He specializes in foreign policy analysis and political leadership –more specially, of Israel and Turkey. His most recent research appeared in *Cooperation and Conflict*, *International Area Studies Review*, and *Turkish Studies*.

Zoltan Feher is a former diplomat from Hungary and a Ph.D. Candidate (ABD) in International Relations at The Fletcher School of Law and Diplomacy. He is currently a Research Fellow at Fletcher's Center for Strategic Studies, and a World Politics and Statecraft Fellow with the Smith Richardson Foundation. He worked as a career diplomat between 2002 and 2015, serving as foreign policy analyst at the Hungarian embassy in Washington DC and most recently as Hungary's Deputy Ambassador and Acting Ambassador in Turkey. In 2015-2016, he was a Mason Fellow and a teaching assistant to Joseph Nye at the Harvard Kennedy School, where he earned a Master in Public Administration. He has also taught as teaching assistant at the Harvard Summer School and the Massachusetts Institute of Technology, and as Adjunct Lecturer at the Political Science Department at Tufts University as well as at leading Hungarian universities. His dissertation research focuses on U.S. strategy toward China in the past fifty years.

Nakissa Jahanbani, Ph.D., is an instructor and researcher at the Combating Terrorism Center and the Department of Social Sciences at the U.S. Military Academy at West Point. She specializes in political violence, specifically terrorism and state support to militant organizations.

Elizabeth Mendenhall is an assistant professor in the Marine Affairs and Political Science departments at the University of Rhode Island. Her research focuses on the progressive development of the ocean governance regime, and in particular the United Nations Convention on the Law of the Sea.

Frank Sobchak (Colonel, Retired) is a Ph.D. candidate in international relations at the Fletcher School of Law and Diplomacy and has taught at the U.S. Military Academy at West Point and Tufts University, and served as a teaching assistant at The Fletcher School of Law and Diplomacy and The Massachusetts Institute of Technology. During his twenty-six-year career in the U.S. Army, he served in various Special Forces assignments in war and peace and represented U.S. Special Operations Command as a congressional liaison. He is a co-editor of the 1,500 page, two volume official history, *The U.S. Army in the Iraq War (Strategic Studies Institute, 2019), and* has been a frequent contributor to television, radio, and print interviews for topics such as Middle East security matters, defense reform, civil military relations, and special operations forces. He is a contributor at the MirYam Institute and has been published in *Newsweek*, *The Jerusalem Post*, *Defense One*, *The Hill*, and *The Jewish News Syndicate*.

Review by Zoltan Feher, The Fletcher School of Law and Diplomacy, Tufts University, and Frank Sobchak, The Fletcher School of Law and Diplomacy, Tufts University

During the authors' undergraduate experiences, having a professor lecture in front of a large auditorium of students was the baseline expectation of how learning would occur. Today's students of international relations are generally more technologically savvy and have higher expectations for creative pedagogical techniques than students from our generation. As a result, educators frequently experiment with new ways to help students learn. Games or simulations provide an innovative technique to demonstrate many of the most important theoretical elements within the field of international relations and can connect the often-disjointed two sides of international affairs: theory and practice. For theory, these techniques can help highlight Kenneth Waltz's levels of analysis as well as John Herz's and Robert Jervis's security dilemma, bandwagoning, and Robert Putnam's two-level games.[2] If done correctly, they can also illustrate many of the key analytical perspectives within the field of foreign policy decision-making. In addition, games or simulations give students insight into real-world decision-making processes and challenges faced by practitioners. However, for a game or simulation to be effective, it must be designed carefully and purposefully.

Almost every effective game or simulation has several key ingredients: students faithfully representing the positions of their assigned roles, time constraints for players to make decisions, a control cell to run the mechanics of the simulation, and a design that ensures players have limited and conflicting information. First, it is absolutely critical that students faithfully play out the roles they have been presented. If a student is assigned to play the role of General Curtis LeMay, the Chief of Staff of the Air Force, during a simulation of the 1962 Cuban Missile Crisis, that student should not be advocating for using negotiations as the main U.S. strategy. In order for a simulation to work properly, there needs to be some degree of conflict: not necessarily military conflict, but interpersonal conflict and disagreement on which option should be the best course of action to follow so that students are forced to discuss, debate, and decide. If all of the players in the game or simulation agree, the scenario will be neither realistic nor enjoyable. Ideally a game or simulation generates conflict both within individual units (a state or international organization) and between units; thereby demonstrating Graham Allison's three models of foreign policy decision-making.[3]

Interpersonal conflict should be exacerbated by two factors -- insufficient information and time. These factors are important because they represent the same challenges faced by practitioners, thereby making the simulation more realistic and demonstrating key aspects of the theoretical concept of heuristics. In some ways the university environment is already suited to include the challenge of time constraints as time will have to be compressed to meet the need for the simulation to conclude before class is over. As such, actions that would normally take weeks can be converted into minutes in order to speed up simulation 'play.' In most cases actions in the game should continue in parallel while decision-makers within units and between units are meeting and debating options. That procedure, again matching the real world, organically creates time constraints as well as making it difficult for the players (students) to stay abreast of current information and forcing them to selectively process data in order to avoid information overload. To further reflect the challenges decision-makers face, incorrect intelligence or misinformation should occasionally and randomly be injected into the flow of communications. Rather than announcing game events to an entire team representing a country, instructors should deliver information to individual elements within that team: from spies and intercepts to the intelligence agencies, diplomatic

[2] Kenneth N. Waltz, *Man, the State, and War* (New York: Columbia University Press, 1954); John H. Herz, *Political Realism and Political Idealism* (Chicago: University of Chicago Press, 1951); Jervis, Robert, 'Cooperation under the Security Dilemma," *World Politics* 30:2 (January 1978): 167-214, DOI https://doi.org/10.2307/2009958; Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-Level Games," *International Organization* 42:3 (Summer 1988): 427-460.

[3] Graham Allison and Philip Zelikow, *Essence of Decision: The Cuban Missile Crisis* (New York: Longman, 1999).

information to foreign ministries, and military reconnaissance to defense establishments. This replicates the challenges of sub-unit bureaucracies, institutional motivations, and proper information flow. Players should be faced with having to make decisions without clarity on what is really happening and with information that could potentially prompt different courses of action.

To keep this process flowing effectively, most simulations or games require an all-knowing control cell. In nearly all cases, a professor and a teaching assistant or two are sufficient to keep a simulation afloat. Faculty serving on the control cell should have a prepared script of major events in the game and should be actively involved in ensuring information is distributed to the right players. They will also be the adjudicators of events and activities when players make decisions that affect other players (such as in the Cuban Missile Crisis scenario below if the USSR decides to launch a crash program to prepare their missiles in Cuba on a more rapid timetable or if the U.S. team decides to launch reconnaissance aircraft over missile sites to determine their readiness). We have found it to be more effective if the control cell offers a menu of basic possibilities for decision-makers to debate and decide upon, although under the right circumstances scenarios with more 'free play' have also been successful. The control cell should also enforce the rules of the game, such as potentially restricting contact between sides (to prevent full information flow and transparency, something that would not happen in the real world) and ensuring that individual players are performing their roles correctly.

We have used these key guiding principles across multiple simulations. Specifically, we have included them in a simulation of the Cuban Missile Crisis with undergraduate cadets at the U.S. Military Academy at West Point; in a simulation of a crisis created by an accident between a U.S. Navy warship and a Kenyan cargo ship carrying Chinese toxic waste within the Chinese littoral for students at the Massachusetts Institute of Technology (MIT); in a simulation of a UN-sponsored climate change conference aiming to reboot the Paris Accords for students at MIT; and a large simulation run by the International Security Studies Program at The Fletcher School of Law and Diplomacy at Tufts University. To give insight into how we structurally organized these simulations, we will discuss each one in additional detail.

The Cuban Missile Crisis simulation was built around the classrooms of two different instructors. Students of one class portrayed the key government representatives of the United States, while the other class portrayed Soviet leaders. All of the most relevant government functions were represented within each country, such as heads of state, personal advisors, foreign ministries, intelligence communities, and military and civilian leaders within the defense establishment. The scenario began with the CIA director receiving word of the discovery of Soviet missiles in Cuba, with a partially accurate assessment on how soon (in class time) they would be operational. Both groups then strategized internally to determine their next moves. To represent the competitive nature of the Cold War, each team was given the opposing side's objectives with regards to Soviet missiles remaining in Cuba and instructed to obtain as many concessions as possible. Most potential actions (sending naval escorts to accompany cargo ships, preparing for air strikes, increasing Cuban air defenses) required a set amount of class time to complete, and were likely to be observed by the intelligence community of the other side.

The classes were separated spatially so as to simulate the communications challenges experienced in the real crisis, where the primary means of communications – diplomatic channels – was slow and could be easily misinterpreted. Communications primarily occurred between the players of the two countries through written messages carried by the control cell, or through in-person meetings of ambassadors (each of whom were stationed in the other country) who themselves received their instructions by written message from their home countries. Players were also allowed to request an in-person meeting between key leaders in order to conduct negotiations, but such a meeting would require time for organization and travel, during which participants would be out of communications while the game continued to play out. Such a combination of the pressure of time, insufficient information, deception, competition, and domestic actors with differing agendas produced an environment that replicated some of the challenges of the crisis and of the Cold War, helping students better understand key aspects of international relations and history.

Set in the near future, the South China Sea crisis incorporated many of the same components, but with some minor variation. Like the Cuban Missile Crisis simulation, the majority of the students acted in key roles across different domestic agencies within China and the United States. While all of the same sub-state organizations, such as intelligence, defense,

executive, and diplomatic, were represented, the scenario added environmental and economic departments. Additionally, given the current multipolar environment, representatives from the United Nations (UN) as well as regional states affected by the ensuing crisis joined the simulation. Each country had its own objectives and was given the latitude to make alliances to further its own aims. We separated the key states spatially and limited communications, but did allow video conferencing between states, as long as a member from the control cell was present to monitor the discussion. The scenario also included considerable uncertainty, much of which stemmed from a lack of clarity on the cause of the accident, the condition of the vessels involved, and deliberate deceit by the countries involved. We purposely spread blame across different entities in order to give each one a motive to potentially conceal its culpability: the Kenyan tanker had not been inspected and did not meet international standards, the Chinese military had hidden that their cargo was a highly toxic pollutant, and the electrical power system of the brand new U.S. Navy Zumwalt class destroyer had failed at a critical time, precipitating the crash. Collaboration among parties was encouraged so as to achieve a peaceful resolution, but the pathway to the end of the crisis involved many dangerous episodes that could have escalated to conflict.

One major change was that unlike in the Cuban Missile Crisis scenario where the 'clock' on events never stopped, in the South China Sea scenario we broke the game into three phases. In between each phase we paused time to reset the simulation, which allowed elements of the control cell to assess the situation and resolve the impact of any of the plans the players had made in each round, and then update the players on those decisions. We did this in this case because we had more time to conduct the simulation (3 hours vs. 55 minutes), and the size of the class was considerably larger (80 students vs. 40). To further help manage the simulation and provide structure and order, the first phase involved internal negotiations within intra-state departments (environmental, intelligence, defense, etc.); the second phase involved discussions between those departments and the state executive to formulate a national strategy; and the final phase involved negotiations between states and the implementation of the strategies that had been decided upon in the previous phase.

Our simulation of a UN-sponsored climate change conference was set in February 2020, with a summit called by the UN Secretary General to reboot the Paris Accords after the withdrawal of the United States. In our scenario President Trump had resigned and Vice President Pence had become the U.S. President, opening new possibilities for a global climate change agreement. Students were assigned to represent one of the major or regional powers; an international organization such as the UN secretariat; or a non-state actor such as transnational non-governmental organizations (TNGOs) or transnational corporations (TNCs). Each country team had three or four executive branch leaders such as heads of state and foreign and environmental ministers, and a generic "negotiator." The control cell consisted of two teaching assistants, who flowed between groups and meetings. Students were asked to do preparatory work before the simulation in coordination with other members of their team, which is a crucial component of every simulation. As with the other simulations, students were expected to stick to plausible actions for their assigned roles, for example, the United States was not likely to agree to cut its greenhouse gas emissions by 50% in five years. We also emphasized that domestic political considerations should also be taken into account and that members of an administration were to report to their respective head of state or government and faithfully carry out their decisions.

This climate change simulation took place in five consecutive rounds, across three and a half hours. In the first round (30 minutes), students had to negotiate within their own team and establish an internal strategy. Participants were separated spatially by country or organization and were not allowed to contact other teams during this time. In the second round (1 hour), the different teams conducted negotiations with other teams in advance of the international summit. This round was meant to be an opportunity to work out the framework of an agreement prior to the summit. In the third round (45 minutes), all students were moved to the main classroom and the actual summit began. Teams could continue to negotiate with one another in an effort to make progress on the agreement while the UN Secretariat simultaneously put together a final proposal, upon which the UN member states would vote. States and non-governmental organizations lobbied for or against elements of the proposal while the Secretariat fought to obtain sufficient votes to gain majority support. In the fourth round (15 minutes), UN member states voted on the proposal. In order to have a successful agreement, not only did a majority of states have to support the proposal, but it also had to include enough of the major polluters so that combined they would amount to at least 50 percent of the share of global carbon dioxide emissions (based on the European Union

(EU) document "Fossil CO2 emissions of all world countries - 2018 Report").[4] In the fifth round (30 minutes), students were asked to write a memo that reflected on the simulation. We assigned grades based upon our observations during the exam as well as the quality of the memos. It was clear that the MIT students cared deeply about the issue of climate change and were able to forge an international agreement despite the opposition of a minority of larger states.

A simulation that served as a model to us while designing our classroom scenarios is the SIMULEX simulation that for decades has been run at The Fletcher School of Law and Diplomacy by Professors Robert Pfaltzgraff and Richard Shultz, the former and current directors, respectively, of the school's International Security Studies Program (ISSP). SIMULEX is an international crisis management exercise whose scenario changes annually. It is a large simulation spread across multiple rooms that involves nearly a hundred participants, including ISSP's military fellows (members of the U.S. military who spend an academic year at Fletcher). Unlike our in-class exercises, SIMULEX's size requires considerable effort, including a large control cell and a long period of advanced planning. Like our in-class exercises, it divides students among country teams, this time according to their preferences.

Many interesting scenarios have played out at SIMULEX. In 1989, it predicted the fall of the Berlin Wall on the weekend before it occurred. In 2016, it focused on a scenario in which Russia seized the three Baltic states and thus provoked a war with the United States and NATO. In 2020, SIMULEX envisioned the continued worsening of the COVID-19 pandemic due to a shorter than expected immunity provided by available vaccines, resulting in a confrontation between a China-Russia alliance and a U.S.-led coalition of allies and partners in the Indo-Pacific as well as NATO member states. The highly complex exercise was run similarly to our simulations described above: it was conducted in several rounds, and at the beginning of each, participants received new information that usually upset many of the strategic moves that they had planned in the previous round.

We have in this essay distilled a few important lessons and best practices from our experience with simulations in IR classrooms. The first and foremost is the necessity for careful and purposeful design. It is also crucial that students are expected to faithfully represent the positions of their assigned roles; this is best achieved by conducting sufficient research on their respective roles in advance of the simulation. A properly staffed and smoothly run control cell is indispensable for a successful simulation.

The design of the simulation should meet certain characteristics. In order to simulate real-world foreign policy decision-making, both time and information should be limited. In terms of the temporal aspects of the simulation, time constraints will force players to make decisions while actions and activities continue in parallel. Information flow should be incomplete and sometimes incorrect. As Norrin Ripsman, Jeffrey Taliaferro, and Steven Lobell have argued, there is often a lack of clarity of international systemic signals.[5] Properly designed simulations incorporate this through an imperfect information flow. If the students are playing in country/organization teams, information should not be delivered to the entire team, but to individual elements in the team. Furthermore, in line with living in an age of information warfare and rampant fake news, incorrect intelligence or misinformation should occasionally be injected into the flow of communications. Limitations in time and information will help generate conflict and disagreement, which ideally should exist within and between teams. Finally, we have found it extremely helpful to reserve time at the end of the simulation to review what happened, to let students reflect on their own and others' behavior and decisions, to draw lessons from the simulation, and to highlight the theoretical concepts and ideas that have come into play during the simulation. After all, the best learning is learning by doing, and games and simulations help students learn and grow in just such a manner. As the events of 2020 have unfolded, many of us have felt as though we are part of a huge international simulation (from COVID-19 to the economic downturn to the U.S. presidential elections). If we want future generations to better be able to tackle new

[4] https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/fossil-co2-emissions-all-world-countries-2018-report.

[5] Norrin M. Ripsman, Jeffrey W. Taliaferro, and Steven E. Lobell, *Neoclassical Realist Theory of International Politics* (New York: Oxford University Press, 2016): 19-22.

challenges than our current leaders have done with the challenges of 2020, we can use games and simulations to help prepare the next generation to do their best even in the worst circumstances.

Review by Nakissa P. Jahanbani, United States Military Academy

Introduction

Terrorism instructors can face a couple of issues. First, it can be difficult to relay the core concepts of terrorism studies to students, as instructors are teaching about covert activities of violent non-state actors, the environments they operate in, and the international, state, and sub-state institutions that counter them.[6] Second, ,the volume of material that needs to be covered in a survey course in particular does not provide a great deal of room for involved in-class activities. I think that simulations followed by debriefings can be helpful to ameliorate both issues, as active learning exercises provide students with agency to internalize concepts in a different manner than they do when listening to lectures.[7] Additionally, in the debriefing, instructors can supplement with other teaching techniques such as lecturing or follow up the exercise with graded assessments. In this piece, I describe the motivation for incorporating simulations in teaching terrorism. I describe an example used in an online terrorism studies survey course titled "Terrorism: New Challenges" at the US Military Academy.[8]

Utility of Active Learning in Terrorism Studies

Games and simulations are useful active learning techniques for teaching analytical skills and fostering a complex understanding of concepts.[9] Through simulations, instructors can assign roles to students, which can seal student buy-in to the activity. When playing roles in a simulation, students are internalizing information through a unique learning experience.[10] One study found that students who learn through role play and collaborative exercises perform better on course assessments.[11] Active learning exercises such as games and simulations benefit not only the students; instructors can

[6] David A. Siegel and Joseph K. Young, "Simulating Terrorism: Credible Commitment, Costly Signaling and Strategic Behavior," *PS: Political Now* 42:2 (2009): 765-771, DOI: https://doi.org/10.1017/S1049096509990151.

[7] Victor Asal, Nolan Fahrenkopf, Amira Jadoon, and Injeong Hwang, "Prisoner's at Midnight: Introducing Undergraduate Students to the Advantages and Disadvantages of Quantitative Analysis through a Simulation Exercise," *European Political Science* (2017), DOI: https://doi.org/10.1057/s41304-017-0115-x.

[8] A special thanks to Victor Asal, who helped me see – time and time again – the utility of incorporating active learning techniques in teaching.

[9] Judith Torney-Purta, "Conceptual Changes Among Adolescents Using Computer Networks Group-Mediated International Role Playing," in *International Perspectives on the Design of Technology Supported Learning Environments*, ed. Stella Vosniadou, Erik D. Corte, Robert Glaser, and Heinz Handl (Hillsdale: Erlbaum 1996): 203-222.

[10] Victor Asal, Steven Sin, Nolan Fahrenkopf, and Xiaoye She, "The Comparative Politics Game Show: Using Games to Teach Comparative Politics Theories," *International Studies Perspectives* 15:3 (2013): 347-358, DOI: https://doi.org/10.1111/insp.12010; Mary Pettenger, Douglas West, and Niki Young, "Assessing the Impact of Role-Play Simulations on Learning in Canadian and US Classrooms," *International Studies Perspectives* 15:4 (2013): 491-508, DOI: https://doi.org/10.1111/insp.12063.

[11] Patrick McCarthy and Liam Anderson, "Active-Learning Techniques versus Traditional Teaching Styles: Two Experiments from History and Political Science," *Innovative Higher Education* 24:4 (2000): 279-294, DOI: https://doi.org/10.1023/B:IHIE.0000047415.48495.05.

witness student interactions, which may be salient for participation grades, or clue them into different aspects of student performance, such as leadership.[12]

The briefing exercise explained in this piece is built on a familiar, effective technique: teaching with case studies. Some existing literature lauds the use of case studies in active learning.[13] In the past, I have used case studies to illustrate lesson material for everything from levels of analysis to religious extremism to disengagement from terrorism. On their own, case studies are versatile and powerful teaching techniques.[14] Instructors can make some front-end framing adjustments to case study exercises in order to repurpose them as a "briefing" simulations.[15] When combined with the tasks of a briefing exercise, case studies provide an opportunity for students to dive deeper into an application of the lesson materials and concepts. Instructors should select cases that have the chance for several outcomes, as this pushes students to think critically about the concepts and their actions and exposes them to others' analytic approaches.[16] Additionally, extant literature has advocated for using a combination of traditional lecture and active learning techniques.[17] In my subsequent comments on using briefings as an active learning exercise, I offer some ways in which traditional learning can be incorporated into this activity.

Why Use a Briefing Exercise?

Briefings lend themselves well to teaching in terrorism studies.[18] Their primary utility lies in their ability to be customized to various subjects, class levels (e.g., undergraduate and graduate), and class lengths. Instructors can think creatively about an institution or setting that is based in reality in order for students to take on specific roles. In the example described later in this piece, the mandate is rooted in a federal government agency. Additionally, assigning students specific roles pushes them to invest in the learning material. In another hypothetical case, instructors may ask students to act as members of militant group that are negotiating with a state for a peace treaty. Students can be provided background information, sources, and be tasked with outlining a plan of action based on certain conditions in their environment.[19] Alternatively, instructors follow a

[12] Pettenger, West, and Young (2013).

[13] Danielle Langfield, "Reality Imagined: The Choice to Use a Real-World Case in a Simulation," *Journal of Political Science Education* 12:4 (2016): 404, DOI: https://doi.org/10.1080/15512169.2016.1147963; Matthew Krain, "The Effects of Different Types of Case Learning on Student Engagement," *International Studies Perspectives* 11:3 (2010): 291–308, DOI: https://doi.org/10.1111/j.1528-3585.2010.00409.x.

[14] Vicki L. Golich, "The ABCs of Case Teaching," *International Studies Perspectives* 1:1 (2000): 11-29, https://www.jstor.org/stable/44218104.

[15] Alternatively, these exercises could be presented as "debates" or other active learning exercises.

[16] Thomas Angelo and John Boehrer, "Case Learning: How Does It Work? Why Is It Effective?" (2002): 1, http://www.soc.ucsb.edu/projects/casemethod/teaching.html.

[17] Candace C. Archer and Melissa K. Miller, "Prioritizing Active Learning: An Exploration of Gateway Courses in Political Science," *PS: Political Science & Politics* 44: 2 (2011): 429-434, DOI: https://doi.org/10.1017/S1049096511000291.

[18] Red teaming is another popular active learning technique popular in terrorism and security studies. For example, see the work of the Center for Advanced Red Teaming at the University at Albany's College of Emergency Preparedness, Homeland Security, and Cybersecurity.

[19] See, for example, Siegel and Young 2009 and Gregory D. Miller, "Teaching about Terrorism: Lessons Learned at SWOTT," *PS: Political Science* 42:4 (2009). https://www.jstor.org/stable/40646686.

similar premise and prompt students to complete the briefing while role playing as diplomatic personnel negotiating with the group.

In a briefing exercise, students not only internalize the material, but they become the objects of theoretical and conceptual applications,[20] which can lead to useful, interesting discussions of the course material, notably in the debriefing. Put differently, students can speak to why they took certain decisions as an individual and as members of a group as well as speculate on why their colleagues did as well, thereby thinking critically about decision-making within the subject matter.

Briefing exercises can be tailored to have different degrees of involvement for students. First, the supporting materials for the activity can be adjusted. Instructors may want to provide materials for their students in order to have more control over the information that the students use or to make it a shorter activity – an option that might be better for undergraduate classes. Alternatively, instructors want students to become well-versed at gathering and vetting sources and constructing a presentation, an option that might be better suited for advanced undergraduate or graduate courses. Briefings can either be fit for part of class or an entire class. Given the nature of the terrorism survey course I taught, multi-class simulations are difficult to incorporate. I therefore used shorter, more structured briefing simulations throughout the course where I could.

Example: Domestic Designation Briefing (Online Course)

In the online version of the survey terrorism course, I ran a briefing simulation where I tasked students to designate domestic terrorist groups. In the exercise, students were told they were part of a special governmental task force part of the Department of Homeland Security (DHS) to draft an inaugural list of domestic terrorist designations.[21] In total, the simulation and the debriefing took about 50 to 60 of the 120 minutes of class time. My class has 15 students, and I split them into two breakout groups of seven or eight. I provided students with all of the required sources ahead of time, and ask them to review them before class along with to the assigned readings.

Students were given the names and background materials for two domestic terrorist groups and split into two different virtual rooms. Their first task was to draft and present a series of factors that would be salient for them to consider. Students were encouraged to draw on the readings and the previous lectures. Once both teams agreed on a series of factors, they spent time reviewing the sources and constructing an argument as to whether or not their assigned group should be added to the designation list. Students' decisions should be assessed along the factors they decided together earlier in the exercise. Their final task was to present their case to the entire class, which then discussed the merits of adding one or both groups to the designation.

The simulation was immediately followed by a debrief. In it, I asked them to discuss their reasoning behind their actions. In this, students have yet another opportunity to define and interact with the concepts but also to consider the series of decisions that might go behind a specific action. The latter consideration can be useful for terrorism studies, as it is important for students to understand and be able to apply theory to the decision-making of the actors.[22] Debriefings also offer an opportunity for instructors to weave in course concepts and readings more explicitly. One study found that an in-

[20] Steven Schacht and Brad J. Stewart, "Interactive/User-Friendly Gimmicks for Teaching Statistics," *Teaching Sociology* 20:4 (1992): 329-332. https://www.jstor.org/stable/1318981.

[21] To the best knowledge of the author, there is no such task force at the DHS or such a designation.

[22] Siegel and Young (2009).

class simulation and debriefing led to better knowledge retention of the subject matter in comparison to other teaching techniques.[23] The debriefing is an excellent transition to a traditional lecture or assessment (e.g., quiz, writing prompt, etc.).

This exercise could easily have been expanded to take the entire class time. If I had used the entire class time, I would have added additional tasks for the group. For example, at the outset, I could have asked students to brainstorm the steps needed to designate a foreign terrorist organization (FTO) and what that could potentially look like if it was focused on domestic designations. What agencies would need to be consulted? What factors of FTO designation could be applied to a domestic designation. Alternatively, students could be asked to outline why a domestic designation has not been done before and why such a list is or is not needed. Finally, students could be asked to draw on historical examples to justify their designation or lack thereof. Taking a different approach altogether, instructors could ask students to come prepared to class with a briefing note, another useful pedagogical tool that incorporates active learning elements.[24] The notes could have been a starting place for talking points in the early stages of the simulation. In the aftermath, instructors could ask students to revise and expand on their memos, drawing on the results of the simulation.

Conclusion

The pedagogical literature tells us that when students are asked to take on specific roles to solve a problem, their decision making is another way in which they can internalize the course materials and concepts.[25] The briefing exercise outlined in this article is an active learning technique where students take on specific roles and work in groups to draft an argument and present results to the entire class.

The example provided here was conducted online and took a little less than an hour, but it could easily be conducted in-person, and be extended or tailored in a variety of ways.

[23] Luba Levin-Banchik. "Assessing Knowledge Retention, With and Without Simulations," *Journal of Political Science Education* 14:3 (2018): 341-359, DOI: https://doi.org/10.1080/15512169.2017.1405355.

[24] Fabricio H. Chagas-Bastos and Sean w. Burges, "The 'Briefing Note' as a Pedagogical Tool for Teaching Politics and International Relations," *Journal of Political Science Education* 15:2 (2019): 237-246. DOI: https://doi.org/10.1080/15512169.2018.1472001.

[25] See for example, Asal, Sin, Fahrenkopf, and She; Pettenger, West, and Young; and McCarthy and Anderson.

Review by Elizabeth Mendenhall, University of Rhode Island

My strategy for tenure-track success can be described as 'two birds, one scone.' The scone is any given project, which feeds the birds of both teaching and research. The idea is to find synergies between my classes and my writing projects, whenever and wherever possible. I baked myself a particularly hearty scone for Spring 2020: a new course, "Governing International Waters" that would support three birds: (1) my obligation to develop a so-called 'Grand Challenge' general education course at my university, (2) my research project on United Nations treaty negotiations,[26] and (3) a new research project about the effects of the course design on student attitudes. To achieve these goals, I designed a course that would allow students to observe two weeks of real-world negotiations, which I would be attending as a researcher. After reporting on the real negotiations, students would then participate in a multi-week simulation of those same negotiations. I had high hopes for this semester.

"Governing International Waters" is a somewhat misleading title because the course really focuses on one particular (and potential) legal instrument for governing 'Biodiversity Beyond National Jurisdiction' (BBNJ). The BBNJ negotiations, which formally began in September 2018, address a suite of four topics: area-based management tools, including marine protected areas; environmental impact assessments, capacity building and marine technology transfer, and marine genetic resources. The new instrument will only cover Areas Beyond National Jurisdiction, such as the high seas and international seabed. Although the agenda is limited to these four issue areas, achieving conservation and sustainable use of BBNJ requires grappling with larger systemic problems, such as ocean warming and acidification, marine plastic debris, and over-fishing. Some states also have broader goals related to justice and equity. The BBNJ negotiations fit perfectly with the purpose of 'Grand Challenge' courses, which take an inter-disciplinary approach to complex issues of contemporary significance, and the ethical challenges they raise.

The fourth session of the BBNJ negotiations was scheduled to take place in the Spring of 2020, and as a researcher it was important that I attended in order to observe and conduct interviews, as I had for the previous three sessions. This was a challenge for scheduling, but also an opportunity to use the live-stream, real-world negotiations as a teaching tool. The BBNJ leadership team was also releasing useful documents, such as an updated draft text of the treaty, and summary documents of the suggestions and preferences expressed by various countries and coalitions. So I wanted to incorporate these resources into the course as much as possible, which would help the students learn about the real world process, and also ensure that I had time to explore and analyze these documents in preparation for the negotiation session.

Because "Governing International Waters" is a general education course, my students came from a wide variety of majors, and many of them were generally unfamiliar with the United Nations and ocean issues. The course design focuses on

[26] Elizabeth M. De Santo, Elizabeth Mendenhall, Elizabeth Nyman, and Rachel Tiller, "Stuck in the Middle with You (and Not Much Time Left): The Third Intergovernmental Conference on Biodiversity beyond National Jurisdiction," *Marine Policy* 117 (July 2020): 103957, https://doi.org/10.1016/j.marpol.2020.103957; E.M. De Santo, Á. Ásgeirsdóttir, A. Barros-Platiau, F. Biermann, J. Dryzek, L.R. Gonçalves, R.E. Kim, et al., "Protecting Biodiversity in Areas beyond National Jurisdiction: An Earth System Governance Perspective," *Earth System Governance* (July 2019): 100029, https://doi.org/10.1016/j.esg.2019.100029; Elizabeth Mendenhall, Elizabeth De Santo, Elizabeth Nyman, and Rachel Tiller, "A Soft Treaty, Hard to Reach: The Second Inter-Governmental Conference for Biodiversity beyond National Jurisdiction," *Marine Policy* 108 (October 2019): 103664, https://doi.org/10.1016/j.marpol.2019.103664; Rachel Tiller, Elizabeth De Santo, Elizabeth Mendenhall, and Elizabeth Nyman, "The Once and Future Treaty: Towards a New Regime for Biodiversity in Areas beyond National Jurisdiction," *Marine Policy* 99 (January 2019): 239-242, https://doi.org/10.1016/j.marpol.2018.10.046; Rachel Tiller, Elizabeth De Santo, Elizabeth Mendenhall, Elizabeth Nyman, and Ian Ralby. "Wealth Blindness beyond National Jurisdiction." *Marine Pollution Bulletin* 151 (February 2020): 110809, https://doi.org/10.1016/j.marpolbul.2019.110809.

preparing students for the simulation, and exercising their decision-making, analytical, and research skills in different ways.[27] It also follows the basic recommendation made by Victor Asal: "the best way to get educational mileage out of a simulation is to treat it as an interactive case where learning takes place before, during, and after the simulation."[28] Assignments were designed to prepare students (individually and as a whole) for the negotiations, and to allow them opportunities to distill lessons about the BBNJ at difference points throughout the semester.

The first half of the course was pretty standard: lectures, readings, and activities that teach students the basic features of the ocean governance regime, and the conflicts and challenges associated with multiple ocean uses and users. I also introduced the four BBNJ issue areas, so that students got a sense of the interests, problems, and practices at play. In the second half of the course, students worked in country teams to formulate positions on the potential BBNJ instrument. I chose teams that represented the most active groups at the negotiations, and included a range of perspectives and preferences. These included countries (United States, Russia, Japan, Norway) and coalitions (African Group, Pacific Small Island Developing States, the Caribbean Community, and the Coalition of Like-minded Latin American states). The plan was for myself and my teaching assistance to intermittently represent the EU and China during the simulation.

Entering the second half of the semester, students spent 2 weeks working in their country/coalition teams to prepare 'country reports' that included basic facts about their country/coalition and its relationship to the ocean, their basic position on each of the major BBNJ issue areas, priorities during the BBNJ negotiations, and potential areas of (dis)agreement with other teams in the class. Students were able to draw on records of their group's previous statements from the *Earth Negotiations Bulletin* reports, as well as the compiled text suggestions from the last round of negotiations. I also organized explicit team-to-team meetings, so students could easily fill out the "areas of (dis)agreement)" section of their reports by talking with one another. This also helps students build a rapport. After grading and providing feedback on the country/coalition reports, teams would later prepare a short presentation on their position which would form the basis of their opening statements during the simulation.

After the country reports were completed, but before the simulation began, there would be a two-week period during which the real world simulations would occur. The original plan was for students to take turns following the live-streamed debate, such that each student watched the debate over 2-3 articles from the draft treaty. They would then produce short reports that summarized the basic content of the articles, identified various positions, and highlighted areas of dispute. This format would mean that there would be one student watching and writing about each part of the real-world negotiations, and compiling and circulating basic summaries that would be useful for preparing the entire class for the simulated negotiations. And because I would be attending and observing the negotiations as they occured, I would make myself available via email to discuss what was occurring at the end of each negotiation day. After the real world negotiations ended, and I returned to campus, we would spend one class period de-briefing the session.

The simulated negotiations were scheduled over 7 class sessions, and structured to hew as closely as possible to the actual format at the United Nations. Beginning with opening statements that express the overall position on key issues of each country/coalition, negotiations would then address each of the four issue areas in turn. Each issue area debate would focus on the most contentious or significant articles, and expand to other articles if time allowed. I built in extra days at the end of the semester, so the pace of negotiations could be flexible. The simulation would follow typical law of the sea negotiating principles, in that decisions would be made by consensus, and the final agreement must be a 'package deal.' In addition to occasionally making ad hoc contributions playing the EU or China, my overall role would be to facilitate the creation of an Informal Composite Negotiating Text, which would be modified to reflect shifting consensus.

[27] Hemda Ben-Yehuda, Chanan Naveh, Luba Levin-Banchik, and Project Muse, *World Politics Simulations in a Global Information Age* (Ann Arbor: University of Michigan Press, 2015): https://muse.jhu.edu/books/9780472121298/.

[28] Victor Asal, "Playing Games with International Relations," *International Studies Perspectives* 6:3 (2005): 359-373.

On each article, student teams would take turns making brief speeches that highlighted their position on the text. After each team had an opportunity to speak, I would review areas of divergence, and then we would enter an open discussion period where students could have informal conversations that seek out linkages between issues, identify possible compromises, and try to persuade one another. Switching between this informal mode, and more formal speeches and submissions of text, mimics the real-world negotiation structure of 'Working Groups' and so-called 'informal informals.' During the negotiations, every day each country team would submit a brief report that addressed how their country's position changed over the course of the day, any obstacles to agreement, and potential resolutions. This would help me follow, and maintain a record, of developments. The next class would begin with my report on the status of the Informal Composite Negotiating Text, and a short list of outstanding issues.

It was my hope that this experience would change student attitudes about the possibility of solving complex, large-scale problems relating to environmental protection and environmental justice. In my experience, like students of global environmental governance more generally, students of ocean governance are prone to negative emotional reactions, including feelings of helplessness and hopelessness, which can engender apathy and cynicism.[29] The phenomenon of "eco-anxiety" is higher among young people, who report higher levels of fear and anger about climate change compared to adults.[30] Ocean biodiversity is directly threatened by human activity, and significantly damaged by ocean acidification and warming. Students can come to believe that the complexity and depth of global environmental problems make effective action impossible, and this is especially true in the case of ocean issues.[31] I wanted my students to feel motivated and empowered, and believe that they can be agents of change.

Having students participate in the simulation right after they watched the live negotiations, and following similar procedures, might help students see that what they are doing is directly related to what the international community might do. This connection is enhanced by students' use of the draft treaty, as well as the actual text suggestions submitted by their country/coalition. Simulating the position and perspective of policy-makers, negotiators, and diplomats may help students start thinking of themselves as leaders and agents of change. And roleplaying during the simulation also crystallizes course content, by asking students to do something new with what they have learned. It requires students to articulate informed opinions about these issues, consider prescriptions and preferred policies, and confront obstacles to resolving collective action problems. It teaches them about regime design, and allows them to practice advocacy. Developing an idea of what proposals are politically feasible will further inform students' understanding of their own policy preferences. The overall course design, which eases students into the BBNJ content and then allows them ample time and space to work with that information shows students that complexity is not the same as opacity or intractability. This was my thinking in designing the simulation.

In order to assess whether the course design, and simulation specifically, affected students' attitudes about ocean governance, I designed a survey that would be delivered several times throughout the semester. Because many students were not Marine Affairs majors, and had no prior knowledge of ocean governance, I intended to conduct the survey three times: after they had learned about the BBNJ issues, after the real world negotiations, and after the simulation. In addition to two basic

[29] Karen T. Litfin, "Person/Planet Politics: Contemplative Pedagogies for a New Earth," in *New Earth Politics: Essays from the Anthropocene* (Cambridge: MIT Press, 2016); Michael Maniates, "Make Way For Hope: A Contrarian View," in *New Earth Politics: Essays from the Anthropocene* (Cambridge: MIT Press, 2016).

[30] Jason Plautz, "The Environmental Burden of Generation Z," *The Washington Post Magazine* (3 February 2020): https://www.washingtonpost.com/magazine/2020/02/03/eco-anxiety-is-overwhelming-kids-wheres-line-between-education-alarmism/?arc404=true.

[31] Jane Lubchenco and Steven D. Gaines, "A New Narrative for the Ocean," *Science* 364:6, 444 (June 7, 2019): 911, https://doi.org/10.1126/science.aay2241.

questions about perception of United Nations efficacy, I asked them to respond to a Likert scale to indicate their agreement with the following statements:

> All countries can get what they want from the 'Areas Beyond National Jurisdiction' in the ocean.
>
> The situation in the 'Areas Beyond National Jurisdiction' is too complicated for effective management.
>
> We can achieve conservation of marine resources in 'Areas Beyond National Jurisdiction.'
>
> We can achieve sustainable use of marine resources in 'Areas Beyond National Jurisdiction.'
>
> Finally, and mostly to satisfy my own curiosity, I asked them to indicate which of the four BBNJ issue areas they felt was easiest, and which the most difficult, to resolve.

Unfortunately, I did not end up giving students the survey, as world events intervened. The fourth session of the BBNJ negotiations was postponed on March 11, 2020, less than two weeks before it was scheduled to begin at the United Nations headquarters in New York City. This cancellation, while somewhat jarring, did not have a major impact on the course design, because there were plenty of useable materials from the first three negotiation sessions. But only a few days later, and during the weeklong Spring break, my university announced that there would be an additional week off in order to prepare to transition all courses online for the rest of the semester. This development was nothing short of devastating to the course design, as several of my students lack access to computers and/or internet at home. I initially released an 'online transition plan' that scaled down the assignments, and planned to move the negotiations onto Slack. But I had to scale down the class two more times because students were floundering, and it was beginning to feel inequitable: it would be unfair if students with more at-home resources received a better grade in the course. In the end, the simulated negotiations were whittled down to a conversation via Slack, which covered 6 articles that spanned 2 of the 4 issue areas.

So in the end, the birds went hungry. This seemed to be happening to lots of academics, as research activities ground to a halt and everyone scrambled to adjust to remote teaching. I do intend to teach the course again, and hope that I can do so in a semester in which the real-world negotiations occur simultaneously. But this is not guaranteed, so it feels a bit like I missed my window. But I did find it extremely rewarding to design a course around my own research on the BBNJ negotiations, and in particular the drivers of treaty design. Because I had attended previous BBNJ negotiation sessions, it was easy to 'set the scene' and describe to students what the actual negotiations are like, in addition to playing the role of the presiding official. Choosing reading assignments gave me more opportunity to spend time with the latest BBNJ publications, and commenting on students' position papers and article reports stimulated my own thinking about the negotiations. But ultimately this course was geared towards the students: helping them feel like empowered, informed, and capable agents of change. Trying to force the simulation in the context of the COVID-19 pandemic would have had the opposite effect.