Affordable Learning Georgia Textbook Transformation Grants

PRELIMINARY REPORT

# General Information

**Date:** June 11, 2020

**Grant Round:** Unknown

**Grant Number:** Unknown

**Institution Name(s):** University of Georgia

**Project Lead:** Andrew P. Owsiak, Josiah Meigs Distinguished Teaching Professor & Associate Professor, Department of International Affairs, aowsiak@uga.edu

**Team Members**: Jeffrey Berejikian, Josiah Meigs Distinguished Teaching Professor & Associate Professor, Department of International Affairs, jberejik@uga.edu

**Course Name(s) and Course Numbers:**

* INTL 3200 Introduction to International Relations
* INTL 4260 Decision Making in International Relations
* INTL 4285 Crisis Diplomacy

**Semester Project Began:** January 2019

**Final Semester of Implementation:** Fall 2020

**Total Number of Students Affected During Project:** Promised: Spring 2020 - Fall 2020 = 510. Interim progress through summer 2020 = 110

Note: The transition to online instruction 2020 may delay full implementation in the Fall. Please see section “*COVID-19”* for an explanation and proposed mitigation plan.

# Narrative

Two inherent obstacles impede effective teaching in the discipline of International Affairs (or Political Science more broadly). The first is familiar to many programs. As they enter the major, few students have had exposure to the subject matter, except perhaps through current events. Issues of national security, cyber conflict, or military deterrence therefore feel remote and obscure, leaving students to struggle to understand the relationship between their coursework and their future careers. The second obstacle arises more specifically in our discipline. Undergraduate students typically cannot practice or obtain actual foreign policy experience while in residence on campus, and not all students have the financial resources to pursue highly competitive—often unpaid—internships.

In this environment, we work as instructors to design classroom experiences—through simulation (or role-playing exercises)—that encourage students to practice and hone the skills required of budding foreign policy professionals. In particular, we confront students with historically accurate foreign policy challenges and ask them to design solutions, thereby creating a simulated experiential learning cycle in the classroom. The setting, although historical, develops that skills needed of contemporary policy-makers as well.

Innumerable foreign policy challenges confront the United States and the global community. No simulation will cover them all. Our game focuses on cybersecurity—a topic of growing interest among our students and those that employ them post-graduation. The game assigns students to be members of the Obama Administration’s National Security Council (2009-2017) and asks them to address adversaries in the cyber realm. Although one might select any modern administration (Clinton-present), we selected the Obama administration because it grappled with two prominent policy decisions in cyberspace: Iranian nuclear proliferation and the 2016 election. The first concerned the offensive use of a cyber weapon against a foreign adversary, while the latter forced the United States to play defense against a foreign adversary. The game therefore requires students to confront both sides of the cybersecurity coin—offense (aggressor) and defense (target). Each side emphasizes distinct concepts and characteristics, and both sides will continue to define the cyber policy space moving forward.

At the outset of the game, Obama (the instructor) convenes his United States National Security Council (NSC) and asks them to write a National Cyber Policy (NCP)—a document that the United States (US) government historically creates and re-creates. Students first receive a character assignment; these characters perform primary and supporting roles on the NSC (e.g., Secretary of Energy). The students then organize into factions (i.e., those with a similar, but not identical perspective; e.g., those focused on ‘national intelligence’ or ‘military/defense’), research their organization (e.g., what does the Department of State *do*?), review a cache of instructor provided resources (e.g., historical information on cyberspace, as well as academic work on cyberspace concepts), and then build an individual/faction-based *general* policy position on cyberspace. The National Security Advisor convenes plenary sessions of the NSC to integrate the complementary policy recommendations, as well as to reconcile the contradictory policy recommendations, of the various factions. At the end of Phase I, students have their own NCP. The NCP outlines the government’s approach to addressing cyber conflicts that *might* arise; thus, students (unknowingly) define the parameters of their policy autonomy in the game *before* encountering the first crisis scenario. They can later deviate from this policy, but not without a cost, since the American public and other stakeholders—who typically lack detailed information about cyber operations—will expect the NSC to do what they promised to the American people in the NCP.

After negotiating the NSC, a dilemma arises. Iran continues to develop nuclear weapons, and the US has possession of a cyber weapon (Stuxnet) that might slow the Iranians down. The Bush Administration began development of the weapon, which Obama then inherits. His NSC, however, must decide whether to continue supporting Stuxnet and whether to deploy it (in history, this becomes the Stuxnet Operation). If students deploy this offensive cyber weapon against Iranian nuclear facilities, (i) it *may* delay Iranian acquisition of nuclear weapons, (ii) it does not promise to eradicate the Iranian nuclear program entirely, and (iii) it is challenging to deploy (i.e., the Iranian computers are not connected to the internet). The NSC must provide President Obama with a policy recommendation, in the form of a National Security Study Memorandum (NSSM). An NSSM defines a problem, lays out various solutions, adjudicates the solutions’ advantages and disadvantages, and then recommends (and justifies) a policy.

Once students submit the first NSSM, the game advances to Fall 2016. At that time, intelligence officials believe that Russia is actively intervening—through cyberspace—in the US Presidential Election. The US now becomes the target of a cyberattack, and Obama convenes the NSC to ask for an NSSM on this matter.

After both scenarios finish, students revise their NCP in light of the game's activities.

## Key Accomplishments, Lessons Learned, Impact on Our Instruction

### Accomplishments:

The central purpose and accomplishment of this project is to address a specific programmatic challenge: to fully realize a departmental learning outcome for all students in residence at UGA (i.e., “combining theory with practice”). For the reasons described above, meeting this goal has proved challenging. It is, however, critical for student success as they enter the workforce. The International Affairs major at UGA enjoys robust and stable enrollments of approximately 800 students per year. With a major this large, it has been difficult to provide multiple and consistent opportunities for students to integrate theory and practice as they move through the curriculum. The greatest challenge appears for new students, who typically have no experience with the subject matter.

How do we best meet the learning outcome described above? For us, the answer lay in INTL 3200 (Introduction to International Relations). Because all students must take this course as a gateway to upper-division classes, it serves as a natural mechanism through which to reach *all* students, including transfer students. We therefore used this project to transform the INTL 3200 course from a passive learning environment (i.e., the simple delivery of basic, foundational information) into an active learning, skills-based experience for students. Drs. Owsiak and Berejikian offer sections of INTL 3200 every year, ensuring that students continue to benefit from this transformation. They also have plans to deploy the game into other sections of INTL 3200 that they do not themselves teach (see below).

### Lessons Learned:

The project's primary goal was to “scale-up” the Reacting to the Past (RTTP) instructional pedagogy, from small classes to large sections, while retaining the strengths of the approach. In Fall 2020, we ran two versions of our simulation game: Dr. Owsiak's small-section class and Dr. Berejikian’s large-section class. This provided us with an opportunity to compare the results of deploying the game in two distinct teaching environments. Based on this experience, we uncovered two challenges to designing a simulation game for large-section classes that we did not anticipate. The simulation ran (relatively) smoothly in the small section, where innovators initially designed the RTTP approach to function. The student experience in the large section, however, was uneven. In particular, the simulation game did not engage the class evenly, and the academic work suffered as a result. We think that we understand why this occurred.

In large-section classes, instructors must address the “collective action problem,” something we did not anticipate. RTTP has an open-ended format, allowing the students to set the agenda, control the course (within reason), and direct their own learning. This strength makes RTTP a favorite tool among faculty and students alike. In large courses, however, such a format allows individual students a greater opportunity to fade into the background and let others take the lead. As a result, simulation games in larger-section classes need more structure provided at the outset.

Moving forward, we hope to address these issues within our game in three ways. First, we will increase the number of small-group assignments and reduce the number of whole-class interactions (i.e., plenary sessions). This “reverses” the RTTP format found in many games, but will, we think, lead to improved outcomes in our game. Second, we intend to redraft the character sheets, shifting the focus away from the traditional RTTP emphasis on personal characteristics and towards the character’s institutional interests, function, and roles. Finally, we will supply students with additional background information on the technical aspects of cybersecurity upfront, rather than asking them to learn about it via group projects. The best approach, we think, will be a loosely structured database of resources that students can sift through and use as their characters see fit. We already have a preliminary database for this purpose.

### Transformative Impact on Our Instruction

For Dr. Berejikian, this project led directly to another, externally funded grant to design a new upper-division course on nuclear politics. The class will use the same game-style method we developed here, and asks students to negotiate revisions to the Nuclear Non-proliferation Treaty (intended to mitigate the threat of nuclear war). The Stanton Foundation supports four undergraduate research assistants over the summer of 2020 (to develop course materials), and the game will go line in Fall 2020.

For Dr. Owsiak, this project encouraged him to redesign and reinvigorate an existing course over the coming year: Advanced Political Simulations. Through a series of board games and role-playing exercises, students will test various disciplinary concepts. They will then identify a concept (i) that they have not seen presented in a game so far, and (ii) that they want to experience directly. They will then design a game for classmates that isolates the concept and teaches it to others.

## Quantitative and Qualitative Measures

Due to structural constraints in the International Affairs degree, the primary indicators for project impact are qualitative, rather than quantitative. Because students chronically over-subscribe to our major, the institution strictly manages course enrollment. Students rarely drop or withdraw from courses because they do not know when another opportunity to take the same course will arise. These characteristics produce a *highly compressed, combined* rate for drops and withdrawals across the entire program (less than 5% per class), with little room for additional movement. Course failure rates sit similarly low. For the first time, however, we observed no failures in either of Dr. Owsiak’s and Dr. Berejikian’s classes.[[1]](#footnote-1)

In lieu of quantitative course data, we therefore report three project impact metrics. First, the game increases long-form, critical student writing. Through group or individual writing assignments, it asks students to write roughly 4,500-5,000 more words than they would in a similar course without the game. Second, the game shifts the focus of the introductory course, from merely delivering basic concepts to developing skills. These include:

* Researching and writing a policy document;
* Conducting evidence-based policy analysis;
* Experiencing and applying course concepts first-hand (e.g., deterrence, crisis diplomacy/bargaining, misperception, and so on);
* Learning about the technical and ethical aspects of cyberspace;
* Grappling with the complexities of group decision-making (e.g., consensus/group-think);
* Engaging in interpersonal and factional bargaining; and
* Developing the ability to express their position in writing and speech—and when necessary, to persuade others of the merits of their position.

Finally, opened ended student evaluations revealed both strengths and weakness in implementation. With respect to strengths, students report high levels of overall course satisfaction and found the simulation itself to be engaging and beneficial. However, students also expressed a desire for greater clarity with respect to assignment rubrics and grading for the varied assignments in the game.

For example, with respect to the simulation comments like this were typical:

*“It’s pretty challenging to keep up with the notes in this course but the discussions are very engaging and the simulation is a lot of fun.”*

*“The National Security Council simulation has been a very interesting way in which to apply what we’ve learned through the duration of the course.”*

*“To do well in this course, it is essential to show up and be engaged. It is pretty challenging to keep up with the notes in this course but the discussions are very engaging and the simulation is a lot of fun.”*

*“This course was amazing! … and the simulation was a very unique learning opportunity that I am really glad I was able to participate in.”*

However, with respect to the grading of assignments:

*“The course was great overall but I felt like the grading criteria weren't laid out well. Different assignments had a different standard of grading and this lack of uniformity was frustrating. I received a high grade on one assignment and then put in a similar amount of effort for the next assignment and received a very poor grade.”*

*“..the assignments did not have normal grading scales and seemed to ambiguous. An A just seemed unattainable and that just seems unreasonable for any class.”*

*“…vague about our in-class assignments and has been very inconsistent with grading but overall would recommend his class”*

The consistently critical comments with respect to grading criteria indicate that students want more specific criteria for their written assignments. While the simulation itself needs to be open-ended, permitting students to experiment with ideas and course concepts, our decision to allow students significant latitude on how they crafted their various policy proposals led them to feel uncertain about what we expected of them. This has led us to revise the materials in Spring 2020-Summer 2020.

## Sustainability Plan

As noted above, Drs. Owsiak and Berejikian will teach sections of INTL 3200 each year, ensuring that this simulation will be offered in both large and small sections at the University of Georgia moving forward. In addition, upon returning to regular face-to-face instruction, they will work with other instructors in the department to incorporate the simulation into additional courses, including additional sections of INTL 3200 and POLS 1101 American Government. Particular focus will fall on providing support and training to graduate instructors.

The document database supporting the project will be maintained on a School of Public and International Affairs server, so that instructors and students may access it as needed. If desirable, and to provide the resource freely throughout the state, Drs. Owsiak and Berejikian can also post the database to their personal websites.

Finally, please see “COVID -19” below for plans to adapt the game to the reality of online instruction.

## Future Scholarship Plans

In 2018, Drs. Owsiak and Berejikian collected preliminary data—via a survey experiment on undergraduates in the International Affairs major—to explore the impact of reframing class assignments in syllabi in order to increase student engagement and satisfaction. The results of this initial inquiry were promising. Student experiences vary significantly, however, across courses, with distinct differences in both content and class enrollment. A wider implementation of the game presents a unique opportunity to revisit the initial survey. Because the game will be identical in each class, we could make direct comparisons across sections, while accounting for differences in instructor style, class size, and content. After implementing this simulation in additional sections of INTL 3200 (via graduate student sections as noted above), we hope to conduct a cross-sectional, longitudinal examination of assignment reframing.

## COVID-19

The disruption that COVID-19 caused, as well as the uncertainty surrounding the return to normalcy, has affected the full implementation of the project in four ways. First, campus closure delayed planned summer and fall workshop training sessions with graduate instructors to extend the simulation to additional sections of INTL 3200 for Fall 2020. Second, the RTTP approach requires face-to-face interactions. These interactions include “formal meetings,” informal “side-bar” negotiations, and team writing and collaboration in real-time. The format itself is critical to the success of the approach, and approximating these interactions online is challenging, if not impossible. Third, the transition to online instruction affected Dr. Berejikian’s summer INTL 3200 section; with little lead-time to plan, only a (significantly) truncated version of the game could be run. Finally, we do not yet know what form of instruction (face to face, online, or hybrid) we will have beginning in Fall 2020.

The intent of this project remains: to develop a cyber security with face-to-face student interaction. However, Drs. Owsiak and Berejikian are exploring a scaled version of the simulation that can be deployed in Fall 2020. In particular, they are planning for the most likely scenario: a hybridized class, in which some students attend physically while others observe lectures and class interaction online. There are several lessons that we derived from our attempt to partially transition the simulation to online instruction this summer.

* Dr. Berejikian’s summer experience revealed that “virtual meetings” (e.g. Zoom) can be effective mechanisms for students to share information with the class - e.g. give presentations on their positions with respect to policy documents. However, virtual classrooms are not effective substitutes for the more dynamic interactions that define the RTTP approach.
* While students can hold “formal committee meetings” in a classroom while observing social distancing, small group collaborations - multiple groups of students huddled together to form policy positions and draft documents – will not be possible.
* For large sections, students will cycle through the physical classroom. This means that the timing of committee work and assignments will need adjustment. Formal meetings, for example, will be staggered as students rotate through the physical classroom, slowing the progress of the game significantly and requiring a reduction in the number of assignments.
* As some students will never attend physically, a need will arise to define which roles can be effectively played online and which require a physical presence.
* We will need to explore the integration of third-party platforms for collaborative project management into the simulation (e.g. Slack, Flodock, Microsoft Teams, etc.) These may be a better mechanism for organizing team work remotely (students often default to Google Docs). If successful, this would have the added benefit of providing students with exposure to the kind of collaborative work that they increasingly encounter in the workplace.

For these reasons, Fall 2020 implementation will most likely be a beta test of a new approach to RTTP. If successful, we will add a “Teaching Online” supplement to the instructor manual in the Spring of 2021.

Workshop training sessions with gradate instructors will be delayed until such time as the campus returns to normal operations.

Attachments:

* Syllabus INTL 3200 Dr. Berejikian
* Syllabus INTL 3200 Dr. Owsiak
* UGA Sponsored Programs Financial Report (delayed)

1. Given the small sample, we cannot attribute this entirely to our use of the simulation. [↑](#footnote-ref-1)