Overview

This lesson with accompanying simulation is loosely based on an experiment that was conducted at Stanford University in 1971. Phillip Zimbardo wanted to see how typical people would act if they were asked to take on roles of prisoners and prison guards for a two-week period. The experiment was stopped after only six days because of escalating, abusive behavior of the guards and concerns about the well-being of the prisoners.

In the simulation, students take on the role of a social scientist, trying to understand how a similar situation (with guards having complete control over prisoners) can create specific human responses, such as fear, repression, and resistance. They can then compare this situation to a host of other similar situations, fictional or real.

Learning Goals

- Interpret data on line graphs.
- Make predictions, document results and give rationale for results in a journal.
- Collect, organize and present evidence to support specific connections to contexts such as literature, history, or current events.

Key system dynamics concepts and insights:

- Action is often ineffective due to the application of low-leverage policies.
- The cause of the problem is within the system.
- Conflicts arise between short-term and long-term goals.

Curricular Connections*:

- Common Core State Standards
- National Curriculum Standards for Social Studies

* See pages 7 and 8 for additional detail.
Lesson Details

Preparation:
1. Check that the simulation runs on the available technology and that the site is not blocked by district filters. Adobe Flash is required to run the simulation online, but most computers (except iPads) have this plug-in installed.
2. Determine one or more contexts to relate to the simulation (Figure 2: Your Role). Note: Some teachers have students read literary works, e.g., *Lord of the Flies* or *Animal Farm*, and/or use the simulation as a way to explore major historical events, e.g., the Holocaust. Depending on the age and maturity of the students, other recent situations, e.g., abuse in the Abu Graib Prison, have strong connections to the dynamics seen in the simulation. You may choose to leave the selection open to students or decide in advance on a specific context that is connected to a particular unit of study.

3. Divide students into teams of two students.
4. Copy any of the optional handouts, as preferred.

Introduction:
1. Describe the simulation in which students will take on the role of a social scientist to better understand human behavior when an individual or group has power over another.
2. Distribute and discuss the project requirements document if desired (Handout 1, page 10).

Running the Simulation:
1. Have student teams open the simulation URL (Figure 1) on one computer and follow the instructions on Optional Handout 2 (page 11) to get started. They’ll read the information on “Home,” “Your Role” and in the “Briefing Room.” Aspects of this exploration are also described below.

An Alternate Option for Instruction
Depending on the students’ access to the Internet from home, consider the idea of flipping your classroom for this unit. Students can complete the simulation and journal as “homework” over the course of several days. During class you can facilitate class and small group discussion so students can compare notes and discuss connections and insights. A final in-class project can bring together two or three students to assemble their individual portfolios and to create a group presentation.
Lesson Details

2. Before changing any variables, students will need to access the journal from the “Briefing Room” (Figure 3) and copy the text into a word-processing document. They can then switch between the simulation screen and the journal document as needed. Students can take screen shots of the graphs and paste them directly into the journal. This will allow them to keep all their documentation organized in one place. As always, encourage students to save their journals frequently to avoid losing their work.

![Figure 3: Briefing Room](image)

3. The “Resource Center” contains background information about the original experiment and prisons in both the U.S. and Norway. Students can access these at any time, either as part of an introduction or to help them explore some of the questions in the “Your Role” section. Since some of the materials have audio, using headphones will decrease potential distractions.

![Figure 4: Resource Center](image)
Lesson Details

4. A key aspect of the simulation is that students make predictions before each run. They start by changing just one variable at a time, eventually building up to changing more. The “Predictions” screen (Figure 5) allows students to graph what they think will happen over time in comparison to a baseline set of graphs (Figure 6). These graphs tell the story of what happens in the simulation if nothing is changed in comparison to Zimbardo’s experiment. Every time students do a new run, they’ll need to complete the following:

1. Decide on the setting(s) to change, based on the run # and record in journal.
2. Make predictions (Figure 5).
3. Run the simulation (Figure 6).
4. Take a screen shot and paste the graphs into the journal document.
5. Answer the questions for that run.

The Baseline Graph Story:
In the original experiment by Zimbardo, the prisoners initially tried to unite in solidarity. Their fear level went down, and they resisted the directions of the guards. This caused the guards to increase their level of repression. They did not trust the prisoners. They began to take increasingly hostile and humiliating actions against the prisoners. This caused the fear level to rise and the resistance to be pushed back down.
Lesson Details

Debrief and Assessment

**Bringing the Lesson Home:**
Debrief and assess the simulation experience using one or more of these options.

**Portfolio with Connections and/or Presentation:**
You may choose to use the requirements document (page 10) with portfolio to assess student learning. The portfolio includes the journal where students record predictions, results and conclusions while running the simulation. In addition, students may demonstrate learning through the creation of connections or a context presentation. Having students complete one or both of these can help them solidify their understanding through making connections to other similar systems. See page 6 for an example connection students could make between the simulation and another context.

**Independent Exploration:**
Have students complete the “Debriefing” and “Connections” sections of the simulation (Figures 7 and 8). Optional handouts on pages 12-14 are available to help students reflect on the content in the “Connections” section.

**Small Group Discussion and Poster:**
Divide students into groups of four, reassigning students who worked together into different groups. With journals in hand, have them compare results and conclusions by answering and giving evidence. Key discussion questions can include:

- What did you discover?
- What variables seemed most strongly connected? Why?
- As a group, rank the five key variables from least to greatest in terms of which had the least impact to the most impact on the system. Have the group create a poster showing conclusions with evidence from the simulation graphs.
Lesson Details

Example Connection from Literature: *Hunger Games*

Note: See the simulation “Connections” section for additional visuals for this example.

Connection #1: As the districts’ resistance grew, the Capitol’s repression rose.

Explanation:
In this book and the others in the series, the Peacekeepers act as the guards. They are the main means of direct repression in the districts, punishing those who do not obey orders from the Capitol. When the districts attempt to resist, the repression goes up.

Evidence with Quote: The Peacekeepers punish citizens on the spot if they break the rules.

“Id have thought in District 11, you'd have a bit more to eat than us. You know, since you grow the food,” I say. Rue's eyes widen.

“Oh, no, we're not allowed to eat the crops.”

“They arrest you or something?” I ask.

“They whip you and make everyone else watch.” (*Hunger Games*, p. 202)

Evidence from Simulation:
Notice that the resistance was set to 2. Resistance spiked up, which caused the level of repression to rise much higher than it did in the baseline.
Lesson Details

Curricular Connection Examples

Common Core State Standards

Reading Standards for Literacy in History/Social Studies 6–12
Integration of Knowledge and Ideas

Grades 6-8
7. Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
8. Distinguish among fact, opinion, and reasoned judgment in a text.
9. Analyze the relationship between a primary and secondary source on the same topic.

Grades 9-10
7. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.
8. Assess the extent to which the reasoning and evidence in a text support the author's claims.
9. Compare and contrast treatments of the same topic in several primary and secondary sources.

Grades 11-12
7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
8. Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.
9. Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6–12

Research to Build and Present Knowledge

Grades 6-8
7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
9. Draw evidence from informational texts to support analysis, reflection, and research.

Grades 9-10
7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
9. Draw evidence from informational texts to support analysis, reflection, and research.
Lesson Details

Grades 11-12

7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

9. Draw evidence from informational texts to support analysis, reflection, and research.

National Curriculum Standards for Social Studies

A variety of the ten strands easily connect to the content of this lesson. These include, but are not limited to:

Strand 2: TIME, CONTINUITY, AND CHANGE
- Studying the past makes it possible for us to understand the human story across time.
- Knowledge and understanding of the past enable us to analyze the causes and consequences of events and developments, and to place these in the context of the institutions, values and beliefs of the periods in which they took place.

Strand 5: INDIVIDUALS, GROUPS, AND INSTITUTIONS
- Institutions are the formal and informal political, economic, and social organizations that help us carry out, organize, and manage our daily affairs.
- It is important that students know how institutions are formed, what controls and influences them, how they control and influence individuals and culture, and how institutions can be maintained or changed.

Strand 6: POWER, AUTHORITY, AND GOVERNANCE
- The development of civic competence requires an understanding of the foundations of political thought, and the historical development of various structures of power, authority, and governance. It also requires knowledge of the evolving functions of these structures in contemporary U.S. society, as well as in other parts of the world.
- Through study of the dynamic relationships between individual rights and responsibilities, the needs of social groups, and concepts of a just society, learners become more effective problem-solvers and decision-makers when addressing the persistent issues and social problems encountered in public life.
Lesson Details

Acknowledgements:
Behind Closed Gates
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Model:
The underlying model in this simulation is based on one created by Barry Richmond in 1993 to illustrate the Zimbardo Prison Experiment. It is used and adapted here with permission from Kathy Richmond and iseecode systems (2013). The concept of connecting the model to literature (Animal Farm by George Orwell) is inspired by another adaptation of Barry's model by teachers in Catalina Foothills School District and with resources provided through the Waters Foundation (www.watersfoundation.org). With permission from CFSD and the Waters Foundation, this original concept is expanded to look at a variety of literature and social systems. Information about the original model was also gleaned from the chapter, “The Power of the Situation: Modeling Classic Experiments in Social Psychology” by James Doyle, Khalid Saeed and Jeanine Skorinko in Tracing Connections.

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Additional Resources:
Common Core State Standards available from http://www.corestandards.org/
National Curriculum Standards for Social Studies (Strands) available from http://www.socialstudies.org/standards/strands
Behind Closed Gates - Requirements
Assemble the following into a neat portfolio using a folder or binder.

1. Hand-drawn, color, cover illustration that shows how your learning from the simulation connects to one or more other contexts
2. Table of Contents
3. Handout 1 – Requirements and Handout 2 - General Instructions
4. Journal
5. Connections and/or Context Presentation

<table>
<thead>
<tr>
<th>Project Assessment Rubric</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td><strong>Cover</strong></td>
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<tr>
<td>My cover is missing or minimal.</td>
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<tr>
<td><strong>Journal</strong></td>
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<tr>
<td>I am missing one or more runs, and other components of my journal are incomplete. My explanations are minimal.</td>
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<tr>
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<tr>
<td><strong>Connections (last two sections of the journal)</strong></td>
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<tr>
<td>My connections are missing or incomplete.</td>
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<td></td>
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<tr>
<td><strong>Context Presentation</strong></td>
</tr>
<tr>
<td>Answers to questions and my presentation is minimal or missing</td>
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</tbody>
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Behind Closed Gates - General Instructions

1. Open the simulation: http://www.clexchange.org/curriculum/simulations/prison_simulation.asp
2. Click “Your Role” and read the introduction. Depending on the instructions from your teacher, you may be looking at a specific context or have a choice.
3. Go to the “Briefing Room” and read through each of the variables that you’ll be able to set. Of the five variables, which of these do you think is most important in this system and why?
4. Go to the “Journal” and copy all the text into a word-processing document. Make sure to save the document as described on this screen.
5. Run the simulation with none of the settings changed and copy the graphs into your journal. To do this, take a screen shot (Macintosh: Command-Shift-4, PC: ALT-PrintScreen) and paste it into your document.
6. After running the baseline, it’s now time to make some changes. You’ll need to follow the directions for each run.
   - Runs 1, 2 and 3 - change one variable
   - Runs 4 and 5 - change two variables
   - Runs 6 and beyond - change three variables
7. Steps for each run
   - Decide on the setting(s) to change based on the run # and record in journal.
   - Make predictions.
   - Run the simulation.
   - Copy graphs into journal.
   - Answer the questions for that run in your journal.
8. Optional: Visit the “Resource Room” at any time to see additional information about the original experiment and prisons in general.
Behind Closed Gates – Identify Interdependencies

Given these parts of the simulation, what are some cause-and-effect relationships. Draw an arrow from a cause to an effect. Can you find any loops, i.e., starting with one variable, see if you can follow the arrows around until you get back to the original variable. Tell the story of your diagram and any loops you find.

Story:
Behind Closed Gates – Identify Interdependencies

Given these parts of the simulation, what are some cause-and-effect relationships? Draw an arrow from a stock (cause) to an inflow or outflow (effect). Can you find any loops, i.e., starting with one stock, see if you can follow the arrows around until you get back to the original variable?

Story:
Behind Closed Gates – Identify Interdependencies

Identify another situation similar to the simulation and identify how the stocks would be labeled in that situation. Make sure to also show the connections. Draw an arrow from a stock (cause) to an inflow or outflow (effect). Can you find any loops, i.e., starting with one stock, see if you can follow the arrows around until you get back to the original variable?

Story: