PACIFIC & ASIAN AFFAIRS COUNCIL

Virtual Simulation Portfolio

PAAC can facilitate the following interactive simulations online via Zoom:

1. **The World of 100: An Introduction to Global Inequality**
2. **PAAC Hunger Banquet: Exploring Global Food (In)Security**
3. **World Climate: Negotiating International Climate Policy**
4. **Climate Action: Identifying Climate Solutions**

Why simulations?
Interactive simulations require students to practice important 21st century skills, including critical thinking and analysis, teamwork, collaboration, and persuasive public speaking.

paachawaii.org

For inquiries or to arrange a simulation, contact Jason Shon, High School Program Director, at hs@paachawaii.org or 808-944-7759.

The World of 100:
An Introduction to Global Inequality

"It opened my eyes to the very uneven distribution of wealth in the world."

Essentially a scripted play with discussions interspersed, this global simulation activity brings statistics about the world to life by imagining the world as a village of 100 people. The main objective is to help students understand inequality from a global perspective in a way that is emotionally impactful.

Originally developed by the Global Environmental and Outdoor Education Council (GEOEC) of the Alberta Teacher's Association, in partnership with the University of Calgary and the Canada's Global Classroom Initiative. PAAC has revised the activity to make it relevant to Hawaii students.

How it Works:
Students are "reborn" into one of five groups in the World of 100. Each group represents 32 countries which are chosen based on wealth (i.e. Group A includes the wealthiest 32 countries while Group E represents the poorest 32 countries). Students are able to compare groups and see in a visually impactful way the "Haves" and the "Have-Nots" of the world.

Completely Virtual:
Though most impactful in person, The World of 100 can also be facilitated virtually via Mural, an interactive digital whiteboard. Students move their avatars, create post-it notes and idea boards, and participate in breakout room discussions.

Up-to-date Statistics from the World Bank
This simulation helps students to understand inequality from a global perspective by using recent data on the world's countries from the World Bank on topics such as:

- Population and population density
- Wealth
- Government Aid
- Health
- Energy

Time Required:
60 minutes for 30 students.

Student Requirements:

- Laptop or desktop computer (smart phones or tablets are not ideal) capable of participating in Zoom calls with the camera function on.
- Stable internet connection

HCSSS Standard Links: SS.WH.8.12.1 , SS.PID.4.16.3 , SS.US.12.16.2

PAAC Hunger Banquet:
Exploring Global Food (In)Security

"It opened my eyes and made me see the bigger picture."

This interactive event brings statistics about global poverty and the unequal distribution of resources to life. Through a powerful script, visual aids, and the stories of real people, students see and compare for themselves how hunger is impacted by income and opportunity. Based on Hunger Banquets developed by Oxfam and Mercy Corps.

How it works:
Students are "reborn" into roles and assigned an income level: high, middle, or low. An Emcee introduces students to each income group and provides details about the living conditions and opportunities for those at that income level. Visual aids and stories are used to enhance the impact of stark differences.

Some students are forced to change income groups depending on the effects of local or global events: *How does a decrease in the price of coffee affect each income group? What happens to farmers in the middle income group when drought strikes?*

Discussions are interspersed to keep students engaged, challenge them to think about factors impacting hunger, and reflect on the changes—small or large—that they can make in their own life to help.

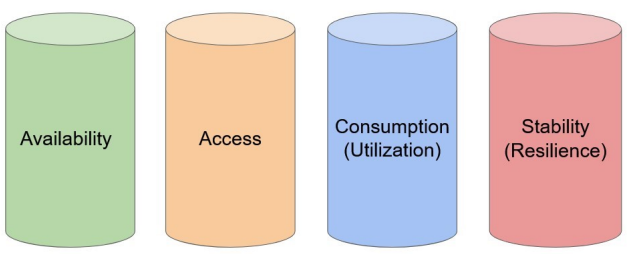
Completely Virtual:
Though most impactful in person, PAAC's Hunger Banquet can also be facilitated virtually via Mural, an interactive digital whiteboard. Students move their avatars, create post-it notes and idea boards, and participate in discussions.

Optional: Presentation & Discussion on Food Security
Hunger is only one aspect of food insecurity. This brief presentation on the four pillars of food security—availability, access, consumption, and sustainability—incorporates local and global examples to provide a more nuanced and multifaceted perspective of this important issue.

"All hungry people are food insecure,
but not all food insecure people are hungry."

Time Required:
- 30 minutes for 30 students
- 20 more minutes for the Food Security presentation and discussion

Student Requirements:
- Laptop or desktop computer (smart phones or tablets are not ideal) capable of participating in Zoom calls with the camera function on.
- Stable internet connection



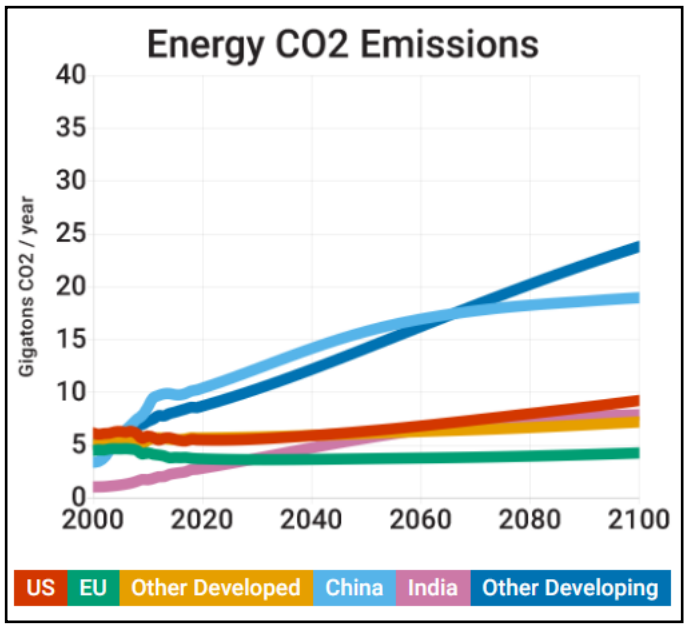
HCSSS Standard Links: SS.WH.8.12.1 , SS.WH.8.7.2, SS.PID.4.10.2 , SS.US.12.8.1, SS.US.12.16.2

World Climate:
Negotiating International Climate Policy

The World Climate Simulation is an interactive, role-playing activity that explores international climate change negotiations. Students play the role of delegates representing one of 6 nations, negotiating blocs, or interest groups. Everyone must work together in their respective roles to reach a global agreement that keeps global temperature rise below 2 degrees Celsius—the goal of the Paris Agreement.

This simulation is unique because it utilizes C-ROADS, a computer simulator that shows the long-term climate impacts of negotiated policy actions. It shows students in real time the combined effect of their negotiated policies on climate change.

The C-ROADS simulator is based on the best scientific understanding of climate change and has been used by top policy makers at the United Nations to assess the impact of climate policies.



The C-ROADS simulator

Assigning Roles
Students are divided into one of six negotiating blocs: United States, China, India, European Union, Other Developed Countries, and Other Developing Countries. Some may also be assigned to represent climate activists, the fossil fuel industry, US cities and states, and the media. Students receive a brief that provides information on that country/region's interests and positions related to climate change.

How It Works:
Acting as diplomats representing their country/region, students negotiate international agreements to reduce greenhouse gas levels by 2100 at a level that keeps global warming below 2 degrees Celsius above preindustrial levels. To do this, each negotiating bloc must decide:

- The year their emissions will stop growing.
- The year their emissions will begin to decline.
- The rate at which the decline in emissions will occur.
- How much effort to address deforestation and promote afforestation
- How much money to contribute to a Global Climate Fund per year (Goal: $100 billion per year)

Negotiations
Depending on time, there can be 1-3 rounds of negotiation. After each round of negotiations delegates reconvene to announce their country/region's commitments. Decisions are entered into the C-ROADS simulator and students see in real time if they have been successful in limiting global temperature rise to below 2 degrees Celsius. Information on climate science is interspersed throughout the simulation.

Debrief
Students share their feelings, discuss insights and reflections, and think of ways to take action.

Time Required:

- 2.5 hr for 30 students OR
- 1 hr for 30 students
  (this version is less interactive, but still impactful)

Student Requirements:

- Laptop or desktop computer capable of participating in Zoom calls with the camera function on.
- Stable internet connection

HCSSS Standard Links: SS.WH.8.12.1, SS.PID.4.16.3, SS.PID.4.10.2 , SS.US.12.8.1, SS.US.12.16.2

Climate Action:
Identifying Climate Solutions

In this interactive, role-playing activity, students representing different interest groups propose solutions to the climate crisis. The goal is to keep global temperature rise to below 2 degrees Celsius above preindustrial levels, and ideally 1.5 degrees Celsius–the goal of the Paris Agreement.

The simulation utilizes EN-ROADS, a computer simulator that visually represents the impact of proposed climate actions on global temperature rise in real time.

The EN-ROADS simulator is based on the best scientific understanding of climate change and has been used by top policy makers at to assess the impact of climate policies.

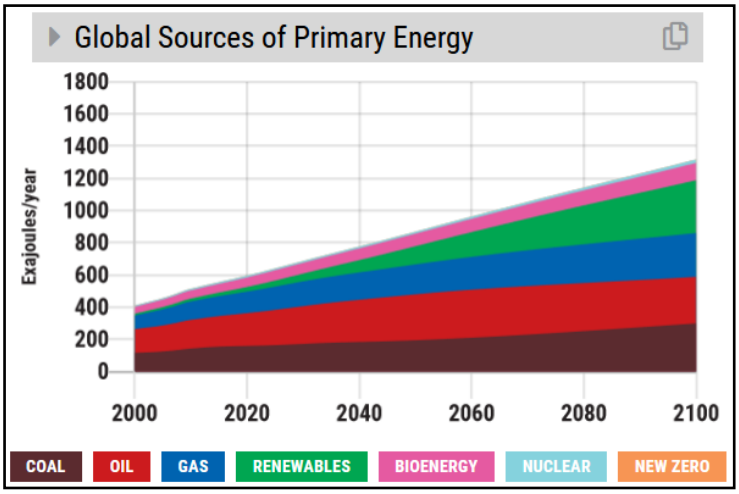
Assigning Roles:
Students are divided into one of six stakeholders: Conventional Energy; Clean Tech; Land, Agriculture & Forestry; Industry & Commerce; World Governments; and Climate Justice Hawks.

How It Works:
Students roleplay as a representative of their stakeholder groups. Working with their group members, they must identify ways to address the climate crisis while staying true to their stakeholder interests. Students can also negotiate with other stakeholders to further their interests.

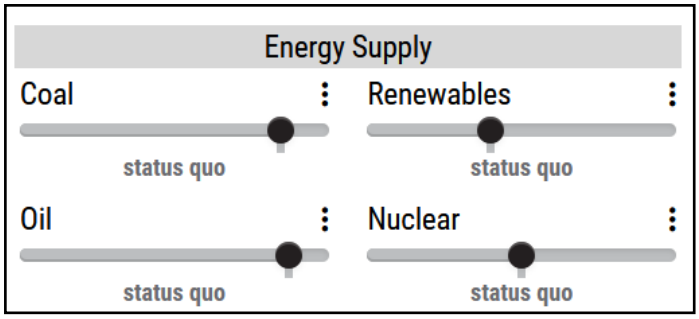
Climate Interventions:
The EN-ROADS simulator has 18 levers. By moving a lever up or down, students can see how global temperatures increase or decrease as a result. Levers include energy sources like coal, renewables, oil, nuclear, and natural gas; policies like a carbon tax; technological developments related to energy efficiency and electrification in transportation and buildings; and other factors like economic growth and population.

Negotiations:
Depending on time, there can be anywhere from 1-3 rounds of negotiation. After each round, groups reconvene to announce their climate actions. Decisions are entered into the EN-ROADS simulator and students see in real time if they have been successful in limiting global temperature rise to below 2 degrees Celsius. Information on climate science is interspersed throughout the simulation.

Debrief
Students share their feelings, discuss insights and reflections, and think of ways to take action.



Part of the EN-ROADS Climate Change Solutions Simulator



Four of the 18 levers students can use to affect global temperature rise

CLIMATE INTERACTIVE
tools for a thriving future

Time Required:
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