Global Citizen Series
Climate Change

OVERVIEW

Topic   Climate Change
Age range 12-18
Subject   Arts & Sciences
Duration   4 weeks

DESCRIPTION

This course pairs classrooms in two different countries. Students meet each other and learn about each other's culture, environment, and community through secure asynchronous video exchanges. They research the impact of climate change on their environment and community, report their findings, and describe plans for action to their peers. Students respond to each other's reports and reflect on their overall experience of doing the exchange.

TASK TOPICS	LEARNING OBJECTIVES Students will:
Task 1: Getting to Know Our Partners	• share their culture with their global partners by creating a video to describe typical school day, favorite activities, sports, holidays, and celebrations. • interact with their global partners about their videos.
Task 2: Research and Plan a Video Report	• read and gather evidence to determine how climate change is affecting their environment and community. • identify a particular issue caused by climate change that is affecting their environment and community and plan a report.
Task 3: Share a Video Report	• create a Video Report using clear reasons and relevant evidence to support claims of climate change's impact on the environment and community. • after viewing the partner video, compare and contrast environmental impact in their own and their partner's environment and community, and propose actions.
Task 4: Reflection	• participate in a class discussion explaining what they learned and what they would still like to learn about their partners and the topic. • prepare a short, written reflection on the exchange (optional).

United Nations Sustainable Development Goals (UN SDGs)

Goal 13 Climate Action Take urgent action to combat climate change and its impacts.

NGSS Middle School

ESS3: Earth and Human Activity

ESS3.d: Global Climate Change
Human activities, such as the release of greenhouse gases from burning fossil fuels, are major factors in the current rise in Earth's mean surface temperature (global warming). Reducing the level of climate change and reducing human vulnerability to whatever climate changes do occur depend on the understanding of climate science, engineering capabilities, and other kinds of knowledge, such as understanding of human behavior and on applying that knowledge wisely in decisions and activities.

ISTE Student Standards

1.1 Empowered Learner
1.2 Digital Citizen
1.3 Knowledge Constructor
1.4 Innovative Designer
1.5 Computational Thinker
1.6 Creative Communicator
1.7 Global Collaborator

New Jersey Student Learning Standards

MS-ESS3-3: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

MS-ESS3-4: Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

MS-ESS3-5: Ask questions to clarify evidence of the factors that have caused climate change over the past century.

6.3.8.CivicsPR.4: Use evidence and quantitative data to propose or defend a public policy related to climate change.

8.2.8.ETW.4: Compare the environmental effects of two alternative technologies devised to address climate change issues and use data to justify which choice is best.

9.4.8.CI.1: Assess data gathered on varying perspectives on causes of climate change (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions.

9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change and use critical thinking skills to predict which one(s) are likely to be effective.

9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1).

9.4.8.IML.7: Use information from a variety of sources, contexts, disciplines, and cultures for a specific purpose (e.g., 1.2.8.C2a, 1.4.8.CR2a, W.5.8, 6.1.8.GeoSV.3.a, 6.1.8.CivicsDP.4.b, 7.1.NH. IPRET.8).

HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability and aesthetics as well as possible social, cultural and environmental impacts.

6.2.12.GeoPP.6.a: Make evidence-based inferences to determine the global impact of increased population growth, migration and changes in urban-rural populations on natural resources and land use.

6.2.12.EconGE.6.a: Evaluate efforts of governmental, non-governmental, and international organizations to address economic imbalances, social inequalities, climate change, health and/or illiteracy.

6.3.12.GeoGI.1: Collaborate with students from other countries to develop possible solutions to an issue of environmental justice, including climate change and water scarcity and present those solutions to relevant national and international governmental and/or nongovernmental organizations.

8.2.12.ETW.3: Identify a complex, global environmental or climate change issue, develop a systemic plan of investigation and propose an innovative sustainable solution.

9.4.12.GCA.1: Collaborate with individuals analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political, economic, cultural).

9.4.12.IML.7: Develop an argument to support a claim regarding a current workplace or societal/ethical issue such as climate change.

9.4.12.IML.5: Evaluate, synthesize and apply information on climate change from various sources appropriately.

9.4.12.IML.6: Use various types of media to produce and store information on climate change for different purposes and audiences with sensitivity to cultural, gender and age diversity.