

UNIVERSITY OF CHICAGO 12TH INTERNATIONAL EDUCATION CONFERENCE

The Hot Topic: Strategies for Teaching Global Climate Change

GENERAL RESOURCES

Climate Change Lessons: Jet Propulsion Laboratory (JPL) California Institute of Technology

This collection of climate change lessons and activities for grades K-12 is aligned with Next Generation Science and Common Core Math Standards and incorporates NASA missions and science along with current events and research.

<http://www.jpl.nasa.gov/edu/teach/tag/search/Climate+Change>

Climate Literacy & Energy Awareness Network

The CLEAN project, a part of the National Science Digital Library, provides a reviewed collection of resources students' understanding of the core ideas in climate and energy science, coupled with the tools to enable an online community to share and discuss teaching about climate and energy science. <http://www.cleanet.org/>

Climate Science Resources from National Science Teaching Association

The largest organization in the world committee to promoting excellence and innovation in science teaching and learning for all. <http://www.nsta.org/climate/>

Common Sense Education: Climate Change Resources for Students and Teachers

Students face a future of increased global temperatures and rising sea levels. They have no option but to grapple with climate change's consequences and to consider what a more sustainable future looks like. However, climate change can feel complex and overwhelming, even for adults. That's why it's helpful to break things down into a set of causes, effects, and solutions. The tools on this list do just that. There are resources and lesson plans for digging into data on everything from CO2 emissions to population density, analyzing environmental and ecological systems, and understanding renewable energy and conservation. With these resources, students can reckon with the realities of climate change and feel like a better world is possible.

<http://www.common sense.org/education/top-picks/climate-change-resources-for-students-and-teachers>

ESSEA Climate Education Modules

The NASA-supported Earth System Science Education Alliance (ESSEA) provides modules for teachers taking ESSEA courses, but teachers may also use the modules with their students.

<http://esseacourses.strategies.org/module.nasa.html>

NASA Climate Change Web Portal

<https://climate.nasa.gov/>

NASA's Climate Kids

NASA's Climate Kids website brings climate science to life with fun games, interactive features and exciting articles. <http://climatekids.nasa.gov/>

NASA Innovations in Climate Education

The NASA Innovations in Climate Education (NICE) project, managed at Langley Research Center, includes a portfolio of 71 climate education initiatives that span across the nation and contribute to the development of a climate-literate public and a climate-related STEM workforce.

<http://nice.larc.nasa.gov>

NASA Wavelength

This reviewed collection of NASA Earth and space science resources is for educators of all levels: K-12, higher education and informal science education. Find climate resources in the collection at the following link, which can be filtered by audience, topic, instructional strategy and more.

<http://nasawavelength.org/resource-search?qq=climate&educationalLevel=&n=100>

National Climate Assessment Teaching Resources

Part of NOAA's "Teaching Climate" section, the National Climate Assessment offers a wealth of actionable science about the causes, effects, risks and possible responses to human-caused climate change. <http://www.climate.gov/teaching/2014-national-climate-assessment-resources-educators>

World Bank Group – Open Learning Campus

The OLC is a destination for development learning that will build the leadership and technical capabilities of all development stakeholders-partners, practitioners, policy makers, staff, and the public. <http://olc.worldbank.org>

RESOURCES ON CLIMATE CHANGE AND FOOD WASTE IN EAST ASIA

Asian Development Bank – CHINA County Data, Fact Sheets and Publications

The Asian Development Bank (ADB) is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. The website contains numerous reports on the climate change impact in the region, as well as specific case studies from China. <http://www.adb.org/countries/prc/main>

The University of Chicago – Educator Outreach Website

<http://educatoroutreach.uchicago.edu>

This site is a collaborative effort by UChicago affiliates to make it easy to stay informed about professional development programs and to connect to resources. You can search for educational resources by Summer Institute and International Education Conference and by keyword category.

The following are materials related to climate change, the environment, and food waste in East Asia that are currently available:

INTERSECTIONS – RELIGION AND ENVIRONMENT IN CHINA

Presentation and Documentary from 2017 UChicago Summer Institute for Educators

<http://educatoroutreach.uchicago.edu/2019/07/11/intersections-religion-and-environment-in-china/>

Additional Resources

- [Project: Can Chinese Culture Save China's Environment?](#) [Pulitzer Center]
- [Earth Focus: Can Religion Save the Environment](#) [Link TV]
- [The Science of Sacred Mountain: An Extended Interview with Dr. Lü Zhi](#) [Pulitzer Center]
- [Can Buddhist Values Offer Non-Religious China a Greener Path?](#) [PBS Newshour]
- [Searching for Sacred Mountain](#) [Pulitzer Center]
- [China, Buddhism, and the Environment](#) [PBS – Religion & Ethics News Weekly]
- [Searching for Sacred Mountain: The Making of a Documentary](#) [Pulitzer Center]
- [The Yin and the Yang: Interview with Martin Palmer](#) [Pulitzer Center]

FOOD WASTE IN DC AND SOUTH KOREA

Presentation and Documentary from 2016 UChicago Summer Institute for Educators

<http://educatoroutreach.uchicago.edu/2019/07/12/food-waste-in-dc-and-south-korea/>

Additional Resources

- [Wasted](#) [online project]
- [Culture of Waste: The Gap Between Food Waste and Food Insecurity](#) by Molly Blankenship [online lesson plan]
- [Getting the Word Out About Food Waste](#) by Fareed Mostoufi [online lesson plan]

RESOURCES ON CLIMATE CHANGE IN EAST EUROPE AND RUSSIA/EURASIA

The Arctic Institute

The Arctic Institute Climate Change web portal:

<https://www.thearcticinstitute.org/projects/climate-change/>

Arctic Institute articles on the Global North:

<https://www.thearcticinstitute.org/publications/articles/>

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THE IMPACTS OF RISING TEMPERATURES ON THE ARCTIC

Presentation from 2019 UChicago Summer Institute for Educators

<http://educatoroutreach.uchicago.edu/2019/09/06/the-impacts-of-rising-temperatures-on-the-arctic/>

Additional Resources

- Cold Comfort Pulitzer Center project by Amy Martin:
<http://pulitzercenter.org/projects/cold-comfort>

THE IMPACTS OF CLIMATE CHANGE ON THE ARCTIC

Presentation from 2016 Summer Institute for Educators

<https://educatoroutreach.uchicago.edu/2019/07/12/the-impacts-of-climate-change-on-the-arctic/>

Additional Resources

- [Thawing Arctic Soils: A Tenuous Present and a Dangerous Future](#) [online project]
- [Climate Change, Archeology and the Arctic: Using details to write persuasive letters](#) by the Pulitzer Center Education [online lesson plan]
- [Chew on This](#) by Roxane Assaf-Lynn [online lesson plan]
- Online Resource list for SIE 2016: [ResourceList FinalVersion](#)

ENERGY AND POLITICS IN RUSSIA AND THE FORMER SOVIET UNION

Presentation from 2014 UChicago Summer Teachers Institute

<https://educatoroutreach.uchicago.edu/2019/07/24/energy-and-politics-in-russia-and-the-former-soviet-union/>

Additional Resources

- [The Politics of Energy Dependency: Ukraine, Belarus and Lithuania Between Domestic Oligarchs and Russian Pressure](#) [University of Toronto Press, 2015]
- [Putin and the Oligarchs: The Khodorkovsky-Yukos Affair](#) [I.B. Tauris, 2014]
- [New York Times articles on Gazprom](#)
- [Russia and Ukraine Keep Talks Alive in Gas Feud](#)
- [Shale and non-Russian gas imports at heart of new EU energy strategy](#)