

Climate Change Across the Curriculum and Beyond! A Conversation with New Jersey's First Lady Tammy Murphy and a Panel of Amazing Educators:

Tracey Maiden, Green Team Coordinator and Educator, Highland Park, NJ; Hank Bitten, Retired Social Studies Supervisor and Executive Director of the NJ Council on Social Studies; Kelly Stone, K-5 Teacher, Long Branch, NJ; Frank Niepold, Climate Change Senior Program Manager, NOAA

Link to the recording: https://youtu.be/IPvIc_aP1Qg

Visit the webinar page to view the slides and continue the conversation:

<https://naaee.org/eeopro/learning/webinars/webinar-climate-change-across-curriculum>

Highlights of the chat transcript:

From Judy Braus to All panelists : Hi, everyone!!!

From MICHAEL CHODROFF to All panelists : Mike Chodroff, Alliance for New Jersey EE

From Sarah Johnson : Hello from Carbondale, Colorado at Wild Rose Education

From Kerri McAllister to All panelists : Hi Kerri McAllister, Shelburne Farms, Vermont

From Laura Landau to All panelists : Laura Landau and I teach in Manville School District, NJ

14:00:55 From Cheryl Zanone to All panelists : Cheryl Zanone New Jersey Science Teachers Assn

14:00:56 From michele stein to All panelists : Michele Stein- Hackensack Middle School/live in East Rutherford, NJ

14:00:56 From Kelly Wenzel to All panelists : Kelly Wenzel - Zooming from home in West Orange, NJ - New Jersey Audubon

14:00:56 From J. Williams to All panelists : New Brunswick Canada

14:00:57 From Meghana Veldhuis to All panelists : Hello! I am Meghana from New Jersey. I am from the Climate Reality Project and I am a high school student.

14:00:58 From Denise Hernandez to All panelists : Denise Hernandez, Eastern PA Coalition for Abandoned Mine Reclamation from PA

14:00:58 From David Oakes to All panelists : Dave - work for CELL from Hope, Maine

14:00:59 From Jennifer Paccione to All panelists : Jennifer Paccione, Clinton Township School District, NJ

14:01:00 From Anne Umali, NAAEE : Hi everyone! Anne Umali, NAAEE, and I'm in Arlington, VA

14:01:01 From Joanne Vogel to All panelists : Joanne Vogel Duke Farms, NJ

14:01:03 From David Ketter to All panelists : David Ketter, Bellingham, WA. Bellingham School District

14:01:07 From Robin Duym to All panelists : Robin Duym - Southern NJ

14:01:08 From Joanna Hanrahan to All panelists : Joanna Hanrahan from Ridgewood. Mom and Climate Change Activist. Volunteering in the schools and community.

- 14:01:08 From Claudia Angle to All panelists : Claudia Angle Teacher in Bridgeton, NJ!
Hello!
- 14:01:08 From Dobrochna Fire to All panelists : Dosia Fire, Red Bank, Private citizen
- 14:01:09 From Vera Figueiredo to All panelists : Hi, I'm Vera from Solar One. I work with
school programs in Newark, NJ and NYC
- 14:01:09 From Kristen Tomasicchio to All panelists : Kristen T from NJ, TMA focused on
sustainability education
- 14:01:09 From Susan Marie Terra to All panelists : Susan Marie Terra from Toms River
NJ& teach in Westfield, NJ - Westfield High School
- 14:01:09 From Dale Rosselet to All panelists : Hi, this is Dale from NJ Audubon...New
Jersey
- 14:01:09 From Farwa Tassaduq to All panelists : Farwa Tassaduq
Pakistan
One Earth Toys
- 14:01:10 From Ed Goodell to All panelists : Ed Goodell, Atlanta GA
- 14:01:10 From Lolita Kiorpes : Hi from Southern Maryland!
- 14:01:12 From Marc Rogoff to All panelists : Marc Rogoff, Environmental Educator, NJDEP
- 14:01:12 From Iresha Jayasinghe to All panelists : Ohio, Ohio State University
- 14:01:13 From Heather Killen : Hello from University of Maryland in College Park
- 14:01:14 From Jacklyn Vandermel : Hi from New Jersey!
- 14:01:14 From Julie Hornsby to All panelists : Julie Hornsby - NYC by way of Tennessee. I
am a Civil Engineer passionate about education :)
- 14:01:16 From Brock Adler to All panelists : Brock from Boston
- 14:01:19 From Suzanne Burwell : Hello from Halton DSB near Toronto, Canada
- 14:01:19 From Kathleen Blazewicz : Diocese of Trenton, NJ
- 14:01:20 From Allison Fitzgerald to All panelists : Hello from NJ!
- 14:01:20 From Kristina Madsen : Hi all! Kristina from Denmark, Foundation for
Environmental Education
- 14:01:20 From Allison Mulch to All panelists : Hi from NJ!
- 14:01:21 From Steve & Pat Miller to All panelists : Pat and Steve Miller, Middletown for
Clean Energy and Climate Reality
- 14:01:22 From Barb Johns to All panelists : Hello from NJ, ANJEE member and Rancocas
Natue Center
- 14:01:22 From Lisa corona to All panelists : Monmouth NJ
- 14:01:24 From Guida Faria to All panelists : Guida Faria, K-12 Science Supervisor NJ &
NJSTA President Elect
- 14:01:26 From Don Haas to All panelists : Don Haas, Director of Teacher Programming,
the Paleontological Research Institution in Ithaca, NY. I'm an author of The Teacher-Friendly
Guide to Climate Change.
- 14:01:26 From John Ottomanelli to All panelists : Hello from Jersey City, NJ. I am a middle
school math teacher, and I am a Climate Reality Leader.
- 14:01:26 From Veronica Leone : Veronica Leone, 9-12 science teacher NJ

- 14:01:28 From Nicole Lemmo Saini : Hello from Bethesda, MD - but working for Environmental Learning Center in Vero Beach FL
- 14:01:29 From Jeff Geist to All panelists : Hello from Duke Farms in Hillsborough, NJ!
- 14:01:29 From Deeksitha Balajirajah to All panelists : My name is Deeksitha Balajirajah. I am from New Jersey, Edison
- 14:01:30 From Roxanne Spencer to All panelists : Joining from Ranney School in New Jersey.
- 14:01:33 From Renee Gracon to All panelists : Renee from Connecticut
- 14:01:36 From Louise Ammentorp : HI from TCNJ
- 14:01:36 From Laura Lano : Hello from Brunswick Maine, from the Gulf of Maine Research Institute!
- 14:01:36 From Andrew Bohackyj to All panelists : Andrew Bohackyj East Brunswick Vocational and Technical High School
- 14:01:39 From Cathy Procopio to All panelists : Cathy from Long Beach, CA!
- 14:01:40 From kathleen bamford to All panelists : Hello! Kathleen From Western Massachusetts
- 14:01:41 From Kate Reilly : Duke Farms, NJ
- 14:01:41 From Jen Nigro : Jen Nigro, Cinnaminson Middle School, New Jersey
- 14:01:42 From Dianne Veilleux to All panelists : Hi, Dianne Veilleux, Middlesex County Vocational Technical Schools, NJ
- 14:01:43 From Rachel Finkelstein : Hello from across the river in NYC from the Mayor's Office of Climate Policy
- 14:01:44 From Michele Morey to All panelists : New Jersey
- 14:01:44 From Mark Godinez to All panelists : Hi from Miami
- 14:01:48 From Alicia Mathewson : Hi everyone - My name is Alicia and I work in Manville, NJ as a 3rd grade teacher - I just finished My Climate Reality Leadership Training and am an active member of my town's green team Sustainable Manville
- 14:01:50 From Vinisha Patel to All panelists : Good afternoon everyone from Monroe
- 14:01:55 From Ron Petherbridge to All panelists : I saw another webinar on Thursday. Is that the same as this one?
- 14:01:55 From Alana Edwards to All panelists : Alana from the Florida Center for Environmental Studies, Davie, Florida
- 14:02:01 From Nan Renner to All panelists : Hello from UC San Diego — Scripps Institution of Oceanography, Birch Aquarium, and Center for Research on Educational Equity, Assessment and Teaching Excellence
- 14:02:02 From Vinisha Patel to All panelists : Twp. NJ, on he
- 14:02:06 From Kerri McAllister : HI Kerri McAllister from Shelburne Farms, VT
- 14:02:06 From Erikka Durdle to All panelists : Hi! I'm Erikka... a High School English teacher from Cincinnati Ohio!
- 14:02:09 From Mehak Zahra to All panelists : I'm from Lahore, Pakistan. Currently enrolled in nature-based learning course for early years affiliated with NAAEE
- 14:02:21 From Christine Key to All panelists : Bergen County, NJ / Org: Climate Reality Project

- 14:02:22 From Susan Golden to All panelists : Susan Golden from Paramus, NJ
- 14:02:22 From Susan Marie Terra : Susan Marie Terra from Toms River NJ & teach in Westfield, NJ - Westfield High School
- 14:02:23 From Betsy Freeman to All panelists : Greetings from Betsy Freeman, Readington Schools. I just finished my Climate Reality Leadership too!
- 14:02:43 From Andrea Drewes : Dr. Andrea Drewes, Rider University Lawrenceville NJ
- 14:02:45 From Monika Sternecker to All panelists : Monika Sternecker, Long Pond School, Andover, NJ
- 14:02:50 From Andrew Bohackyj to All panelists : High School Biology/ Environmental Science.... Middlesex County Vocational and Technical High Schools
- 14:02:52 From Graceanne Taylor to All panelists : @Susan Marie Terra Hi from Save Barnegat Bay - Toms River!
- 14:03:02 From Heather McCall to All panelists : Heather McCall, Program Director Sustainable Jersey for Schools www.sustainablejerseyschools.com
- 14:03:03 From Catherine Krause : Catherine Krause Avalon NJ middle school
- 14:03:05 From Emily Fano : Emily Fano, National Wildlife Federation in New York City
- 14:03:09 From Donna Macalle-Holly to All panelists : Good afternoon. I'm Donna Macalle-Holly representing the Lake Hopatcong Foundation, a 501(c)(3) organization who provides environmental education field trip programs on New Jersey's largest lake.
- 14:03:09 From Tm Miller to All panelists : Hi everyone! Tim from Mountain Castles Soil & Water Conservation District, southwestern VA
- 14:03:31 From Elaine Mendelow to All panelists : Elaine Mendelow I am a retired Gifted and Talented Teacher and just completed the Climate Reality Leadership Training. I have taught climate units throughout my teaching career.
- 14:03:31 From Diana Burich to All panelists : Hello all, from Diana Burich, New Jersey Sea Grant Consortium
- 14:03:39 From Missy Holzer to All panelists : Missy Holzer, Great Minds, Somerset, NJ
- 14:03:53 From Vinisha Patel to All panelists : Good afternoon everyone on behalf of the Monroe Twp. High School Environmental Action Club! I serve as the President as well as student representative on the Monroe Twp. Environmental Commission.
- 14:04:09 From Mark Pankau to All panelists : Mark Pankau, NW VA Regional GREENetwork
- 14:04:48 From Christa Delaney : My name is Christa Delaney. I teach science in EHT, NJ.
- 14:05:37 From Christina Overman to All panelists : Lambertville, NJ! I teach STEM to K-5.
- 14:05:57 From Vinisha Patel : Good afternoon everyone on behalf of the Monroe Twp. High School Environmental Action Club! I serve as the President of the club as well as student representative on the Monroe Twp. Environmental Commission.
- 14:06:00 From Dianne Veilleux to All panelists : Just finished Climate Reality Leadership training. Great resource
- 14:06:42 From Christine Westra to All panelists : Hello from NJ Climate Reality! Wayne, NJ
- 14:06:50 From Beverly Murdock to All panelists : Hello my name is Lynne Murdock and I am retired from NPS. Looking to reenter work force! Speaking from Mount Airy MD today.

- 14:07:19 From Beverly Murdock : Hello my name is Lynne Murdock and I am retired from NPS. Looking to reenter work force! Speaking from Mount Airy MD today.
- 14:09:00 From Crystal Brown : Crystal Brown Englweod Environmental Commission
- 14:09:30 From Lois Kraus : Lois Kraus, Westfield Green Team and retired middle school teacher
- 14:10:06 From harriet shugarman : Harriet Shugarman, ClimateMama, Chair, NYC Metro Chapter, Climate Reality
- 14:10:41 From Paul Soltis to All panelists : Hi I'm Paul at Wallace House & Old Dutch Parsonage State Historic Sites in Somerville. We are celebrating the Department of Environmental Protection's 50th Birthday this year.
- 14:10:53 From Judy Braus : Welcome to everyone!
- 14:12:05 From Debbie Mescal : hello
- 14:12:20 From Allison Mulch to All panelists : Hi Kelly! I still have the plaque too!
- 14:15:16 From Jen Kretser : Jen Kretser, Director of Climate Initiatives at The Wild Center (northern NY) and member of NYC Climate Resilience & Education Task Force; Climate Literacy & Energy Awareness Network Board & Climate Reality. This is really exciting and I am so happy to be here - this is a great model for the nation!
- 14:16:12 From Mehak Zahra : I'm from Lahore, Pakistan. Currently enrolled in nature-based learning course for early years affiliated with NAAEE
- 14:17:36 From Julia Sommer to All panelists : Julia Sommer, Maplewood, NJ. Green Team Rep for Tuscan Elementary Sch and district Green Team. Also teacher of enrichment classes about sustainability.
- 14:19:08 From Betsy Freeman : Betsy Freeman, Readington Schools, NJ. Love that CC will be integrated across curriculum, and that NJ is at the fore. Tx to First Lady Murphy!
- 14:19:57 From Christine Westra to All panelists : I would love to see a climate friendly diet presented as part of Health and Nutrition modules.
- 14:20:28 From Christine Westra to All panelists : I would love to see electric school busses!
- 14:22:20 From Dana Lawit : Dana Lawit, school leader in Brooklyn, NY | NYC Climate Education Task Force member - Excited to hear NJ's path to including CC in state standards. Eager to bring that learning across the river!
- 14:22:21 From Erikka Durdle : amazing!
- 14:22:37 From Marc Rogoff : Be sure to check out the Alliance for NJ EE web site at www.anjee.org
- 14:22:44 From Diego DeAssis to All panelists : WAY TO GO KELLY! LB is proud of you!
- 14:23:31 From Christine Westra to All panelists : Short article introducing Climate Friendly Eating www.audubon.org/magazine/january-february-2009/the-low-carbon-diet
- 14:23:32 From Don Haas to All panelists : PRI has many free resources for teaching about climate and energy, including our Teacher-Friendly Guide to Climate Change. See our climate and energy resources here: <https://www.priweb.org/learn-and-teach/climate-change-and-energy>
- 14:23:45 From Christine Westra to All panelists : What a great panel - walking the walk!!!

- 14:24:08 From Marc Rogoff : Also check out NJDEP SEEDS, the State EE Directory Site at www.nj.gov/dep/seeds
- 14:24:41 From Louise Ammentorp : The College of New Jersey now has a 4-course graduate certificate in Environmental Sustainability Education. The four courses include: Biotechnology systems and sustainable design, Environmental Science for Teachers and Leaders, EcoJustice and Socioscientific Issues, and Equity, Diversity, and Inclusion in Environmental Sustainability Education (with a focus on UDL). Reach out to Lauren Madden at maddenL@tcnj.edu for more information.
- 14:25:09 From Paul Soltis to All panelists : Celebrate DEP's 50th Birthday with your students at our special website: <https://nj.gov/dep/dep50/>. Check out our "Things to View and Do at Home" including environmental science lessons and virtual visits to State Parks, Forests & Historic Sites: <https://nj.gov/dep/dep50/activities.html>
- 14:25:16 From Don Haas to All panelists : See also the Climate Literacy and Energy Awareness Network (CLEAN) collection at cleanet.org/
- 14:25:28 From Susan Golden : You can grow your impact by joining with other Climate Change Activists through Climate Reality Project local chapters or a training. Opt in to a chapter at this site: <https://www.climaterealityproject.org/chapters>
- 14:25:44 From Marc Rogoff : Another important site: www.sustainablejersyschools.com
- 14:26:09 From Emily Fano : The National Wildlife Federation in New York City convenes the Climate and Resilience Education Task Force that includes city, state and federal agencies, NGOs, teachers, and a Youth Steering Committee that is working on strengthening the network of youth climate activists in NY. We're working to ensure that what happened in New Jersey can happen in New York City! Thank you for your leadership Tammy Murphy! <http://www.cretf.org>
- 14:26:29 From Donald Wahlers : Just completed the Climate Reality Leader Training!!!
- 14:26:49 From Marc Rogoff : <https://njudubon.org/green-ribbon-schools/>
- 14:27:07 From Claudia Angle : Thanks Marc need more info on that!
- 14:27:19 From J. Williams : CLEAN network is one of those partners
<https://cleanet.org/clean/community/index.html>
- 14:27:39 From Claudia Angle : Just completed Climate Reality Leader Training too!
- 14:27:52 From Dale Rosselet to All panelists : I am pleased to hear the clear the direct connections among environmental education, sustainability education and climate education. Between ANJEE, the NJ Commission on Environmental Education, the non-formal organizations that already integrate climate education into learning there a many, many place-based resources that teachers can rely on.
- 14:28:15 From Heather McCall to All panelists : Follow all of the great things going in Kelly's School: George Catrambone Elementary School in Long Branch Twitter: #StrawFREEinLB @greener_glc
See videos, garden photos for all Long Branch Schools and more at <https://sites.google.com/longbranch.k12.nj.us/gardens/home-page>
- 14:28:53 From Lolita Kiorpes : Thank-you New Jersey! You rock! Hope it doesn't take too long for other states to follow your impressive step forward!
- 14:29:16 From Marc Rogoff : Marc Rogoff, Environmental Education Specialist, NJDEP
marc.rogoff@dep.nj.gov

14:29:53 From harriet shugarman : Thanks for setting this very high bar. and to have this leadership from the top. Critical to success in NJ will be teacher training/retraining, and funding to support training and curriculum resources. Teachers have so much on their plates already, for many teachers who don't have as much experience as Kelly and Tracey, what is the state going to do to help local school districts? Washington state has a budget line item to support climate science education training for teachers, perhaps Frank can speak to that?

14:30:11 From Alana Edwards to All panelists : I'd like to share a series of CC lessons developed a few years ago by our university. www.ces.fau.edu/nasa

14:30:16 From J. Williams : Social studies is a key area to unpack the decision -making power and participatory action of citizens; students must have opportunities to see that they decision at home, school and play, has impacts (intended and unintended)

14:30:19 From Don Haas to All panelists : Interdisciplinary resources for teaching about climate and energy: <http://bit.ly/InterdisciplinaryClimate>

14:30:23 From Catherine Krause : I also just completed the Climate Reality Leader training

14:30:31 From Nan Renner : Can you talk more about how we build on individual actions and move to collective action that addresses how racist, capitalist economies—that sacrifice people and places—have created the climate crisis?

14:31:13 From Marc Rogoff : <https://www.nj.gov/dep/climatechange/>

14:31:30 From Renee Haider to All panelists : To learn more about Sustainable Jersey for Schools visit sustainablejerseyschools.com

14:31:38 From Allison Mulch to All panelists : Engage K-12 students with Eco-Schools USA in New Jersey's Climate Change, Energy and Biodiversity Pathways for school or home-based problem based learning through NJ Audubon at <https://njudubon.org/eco-schools/>

Schools and districts can reduce energy and water consumption, increase air quality and improve climate change education across their curriculum by following the recommendations provided by the U.S. Department of Education Green Ribbon School at <https://njudubon.org/green-ribbon-schools/>

Training and program assistance is free. Contact allison.mulch@njudubon.org to get started.

14:33:04 From Marc Rogoff : NJ Governor's Environmental Excellence Awards: <https://nj.gov/dep/awards/>

14:33:24 From Judy Braus : Thanks to the panelists for emphasizing the importance of interdisciplinary learning and how to bring change to the communities where they live!

14:33:25 From Pramod Kumar Sharma to All panelists : How civic engagement is realised though climate change education ?

14:33:55 From DP Drewes : Donna Drewes, former Co-Director of the Sustainable Jersey for Schools and Municipal program. So excited to see the excitement and momentum to address climate change in all NJ schools. So proud of the 968 schools and their participating districts, engaged and supported by the Sustainable Jersey for School program

<http://www.sustainablejerseyschools.com/>

14:34:12 From Christine Westra to All panelists : @Lauren Madden - Wow that's fantastic!

14:34:33 From Emily Fano : What will New Jersey's climate curriculum look like, who will develop it, and will there be a process to get input from teachers, CBOs, and students?

14:34:35 From Susan Marie Terra to All panelists : First Lady, I am just curious if NJ teachers will be receiving professional development for this webinar and for completing Vice President Al Gore's Climate Reality Project training. Sorry to ask but I planning on spending August prepping for the first time to teach AP Environmental Science ever at Westfield High School so I need to know if I should look for additional PD prior to the start of the school year. This year of teaching will be challenging with the unknown scheduling with students in person or virtual, so if PD hours are provided it will be one less thing to worry about. Thank you but I need to know to plan accordingly.

14:34:52 From Andrea Drewes : Science tells us what IS happening now, but social studies can help us decide what SHOULD be happening NEXT

14:35:27 From Roxanne Spencer : Climate Reality Leadership Corps is having its second virtual global training from August 28 to September 3. www.climaterealityproject.org

14:35:45 From Dale Rosselet : I am pleased to hear the clear the direct connections among environmental education, sustainability education and climate education. Between ANJEE, the NJ Commission on Environmental Education, the non-formal organizations that already integrate climate education into learning there are many, many place-based resources that teachers can rely on. Sustainable Jersey for Schools and Eco-Schools USA in New Jersey <https://njudubon.org/eco-schools/> are great resources that support teachers and student learning.

14:36:12 From Christine Westra to All panelists : I'd love to see Climate Smart choices for school lunches!!

14:37:07 From Susan Marie Terra : Dale is a great instructor!!!

14:37:37 From Michele Joseph to All panelists : Excited to empower our middle and high school students to address the challenges related climate change! Thank you First Lady Murphy for this opportunity to share and exchange! SGAP LEADERS & SCoPA

14:38:11 From Rezwan Razani to All panelists : Yes! Artists. Also, thinking of youth, consider sports and games. Check out our approach to teaching. This is Rezwan Razani, founder Footprint to Wings. Here's our "First Gigawatt Down" football themed education video: <https://youtu.be/8--VSh0JUT0> Also, check out the "Zero Carbon Coaching Clinic" candid, accessible, systematic walk through of the solutions for youth, community members & policy makers of all ages: <https://youtu.be/p4ECGpXvjxY>

14:38:33 From Elizabeth Spike to All panelists : How will public schools in NJ assess student learning outcomes for GCC? Does NJ have end-of-course exams?

14:41:41 From Allison Mulch : From Me to All Panelists: 02:31 PM
Engage K-12 students with Eco-Schools USA in New Jersey's Climate Change, Energy and Biodiversity Pathways for school or home-based problem based learning through NJ Audubon at <https://njudubon.org/eco-schools/>.

Schools and districts can reduce energy and water consumption, increase air quality and improve climate change education across their curriculum by following the recommendations provided by the U.S. Department of Education Green Ribbon School at <https://njudubon.org/green-ribbon-schools/>

Training and program assistance is free. Contact allison.mulch@njudubon.org to get started.

- 14:41:49 From Michelle Finchum to All panelists : tell your neighbor that electric lawnmowers are awesome (and not noisy)
- 14:42:28 From Michelle Finchum to All panelists : Thank you for bringing up racial justice in this field.
- 14:44:30 From Mehak Zahra : Unfortunately, climate change is not a priority for authorities and decision makers in Pakistan at the moment. Whoever is talking about it or making any efforts are on personal level. Very few organizations are active to take steps. This session is an eye-opening for me and I'm extremely grateful for this opportunity. I've picked up some great ideas. Thank you!
- 14:46:06 From Judy Braus to Mehak Zahra, All Panelists : Thanks for sharing, Mehak! We know it's very hard in some countries, some states, and some communities, And I hope some of these resources will help!
- 14:46:21 From Mehak Zahra : Definitely!
- 14:47:22 From Jennifer Webb to All panelists : I taught high school English for six years, and I have been a substitute teacher (K-12) for 15 years. I have a great passion for environmental education, and unfortunately I have not been able to find much opportunity for green education jobs (outside of science) in California. Can you point me to some resources where I can find teaching job opportunities for green education in the humanities realm?
- 14:47:53 From Elizabeth Spike to All panelists : What kind and how much push back did NJ get while deliberating over the adoption of GCC in its curriculum? You have a good deal of oil and gas presence in NJ. Did they cooperate?
- 14:48:00 From Dale Rosselet : It is great to hear the panelists talking about the importance of connecting children with nature and ecology as a basis for understanding the more complex problems and issues around sustainability and climate.
- 14:48:11 From Veronica Leone : We all have experts in our community. Reach out to parents, staff, and colleagues to see who they know. Bring in a scientist or environmentalist to speak to your students. I'm a teacher, and also a newly trained Climate Reality Leader, and we are expected to present to various audiences. Your community is invaluable.
- 14:48:34 From Rezwan Razani : Yes! Oysters! A great video about a live NY Oyster project now: <https://youtu.be/kHxvYpc8IAA> Fighting climate change w/ oyster restoration. One of my favorite projects!
- 14:49:22 From harriet shugarman : no..not near enough.. Washington state commits 4 million a year just for climate science teacher retraining.
- 14:49:25 From Judy Braus to Jennifer Webb, All Panelists : Hi, Jennifer. There are so many wonderful possibilities in the humanities. We'll try to find link you to resources that can help. For example, we had a webinar with a wonderful poet and writing teaching, linking it to the environment. So more soon.
- 14:51:01 From Kristen Tomasicchio to All panelists : Re: oyster history in NYC: Check out, the Big Oyster, history on the half shell by Mark Kurlansky. great book!
- 14:51:03 From Ashwani Vasishth : @harriet Shugarman's comment...not just for science teachers, but for all teachers. Ideas abound. Institutional resources are scarce.

14:51:15 From Jen Kretser to All panelists : What advice do you have for educators/orgs in other states that would like to integrate K-12 standards across the curriculum? AND make an investment to support this education through funding and training broadly

14:51:29 From Susan Marie Terra : AmeriCorps NJ Watershed Program is also a great program that is free to schools to have an ambassador present with hands on activities for students!!

14:52:36 From Jennifer Webb to All panelists : Thank you! I designed and taught a humanities oriented green class to middle school students a couple summers ago and absolutely loved it! Unfortunately, my program was cut to make room for STEM, and the program could not imagine offering both. I appreciate any resources you have that may lead to green humanities job opportunities!

14:54:07 From Judy Braus to Jennifer Webb, All Panelists : I'm sorry your course was cut. But I love the link between the humanities and environmental education and so important. And so many overlaps. Keep it up, even though it's tough. And we'll see if we can identify others to help.

14:54:09 From Rezwan Razani : Yes! Watersheds! Mehak Zahra's comment reminds me about an awesome watershed restoration project over in India (Pakistan adjacent :)). The Paani foundation "Water Cup" that got communities to coordinate around watersheds and is amazingly successful! Also leverages games ("water cup") which is another reason I love it. Inspirational overview video here: <https://youtu.be/-8nqnOcolqE>

14:54:15 From Missy Holzer to All panelists : Science Education for a New Civic Engagements and Responsibilities (SENCER) virtual Summer Institute will take place Thursday-Sunday. Embedded in the program is a K12 strand focused on climate change education. (<http://sencer.net/20th-sencer-summer-institute-will-be-virtual-july-30-august-2-2020/>)

14:55:15 From David Ketter to All panelists : Harriet - yes, WA State commits \$4 million (which is awesome!) but they have not (yet?) committed to integrating CC education across the curriculum (no CC standards in SS, as far as I know) so not all teachers are benefitting from the CC ed. PD program here (called ClimeTime). This webinar is inspiring to work towards a more comprehensive, integrated approach to CC education. We know we need and some are doing it but without it being mandated across the curriculum, it remains relegated to science.

14:55:25 From Mehak Zahra : @rezwan thanks for sharing.

14:55:57 From Julia Sommer to All panelists : In remote learning, how can some of these activities work? Can people give ideas? I'm thinking about Citizen Science activities but would love to hear about other initiatives for this fall.

14:56:08 From Beverly Murdock : storm water runoff?! I am familiar with some programs in NY with Rutgers and the NPS and Gateway, I believe a NOAA affiliate as well

14:56:33 From David Ketter : Harriet - yes, WA State commits \$4 million (which is awesome!) but they have not (yet?) committed to integrating CC education across the curriculum (no CC standards in SS, as far as I know) so not all teachers are benefitting from the CC ed. PD program here (called ClimeTime). This webinar is inspiring to work towards a more comprehensive, integrated approach to CC education. We know we need and some are doing it but without it being mandated across the curriculum, it remains relegated to science.

14:56:37 From Beverly Murdock : the storm water work was taught to communities, I think the fellow was named Norm

14:58:01 From Beverly Murdock : education programs from NPS sites in NJ use the state standards, such as Thomas Edison

14:58:26 From Elizabeth Spike to All panelists : Are you cross pollinating GCC in nearby states? Are they listening and learning from you?

14:58:49 From Dale Rosselet : Additional place-based resources for New Jersey that could be applied elsewhere that specifically focuses on coastal community hazards.

<https://www.nj.gov/dep/seeds/bescch/index.htm>

14:59:48 From harriet shugarman : agreed David, but they have committed \$4 million for science teacher training, we need funds committed as Hank mentioned, get the legislature to commit funding - but let's go higher than \$250,000. First Lady has set the high bar, let's now see how we can get training and curriculum funded through the legislature...

15:00:44 From Heather McCall to All panelists : Tracey's Outdoor Learnscape at Bartle Elementary in Highland Park profiled in NJEA's Classroom CloseUp ffd to 20:35 to see Tracey in action! <https://www.youtube.com/watch?v=6IOSU4H9-4o>

15:01:26 From Elizabeth Spike to All panelists : Looking forward to lessons learned. Outstanding job NJ. A+

15:01:28 From MICHAEL CHODROFF to All panelists : You are all a fine example of why New Jersey has been doing such a great job with Environmental and Climate Education. With the support of our First Lady, ANJEE is ready to help all educators (formal and nonformal) become even more versed in these topics and educate their students even further. Thanks to all of yoU!

15:01:42 From Lois Kraus : Teachers should also look to their Environmental Commissions / Green Teams to partner up on local projects. Westfield has just launched NJ.adopt-a-drain.org to make residents aware of the value of cleaning storm drains, reduce local flooding and help maintain our local watersheds. There are many tie ins for students and this kind of initiative.

15:02:09 From Judy Braus to MICHAEL CHODROFF, All Panelists : Thanks for all you do!!!

15:02:09 From Julia Sommer to All panelists : Helping students understand the role of citizens in our democracy is key to all this. In fact, I've heard many students ask what it will take to convince the Governor to place a moratorium on all new fossil fuel infrastructure in NJ. I'm never sure what to tell them-- any advice?

15:02:10 From Diana Burich to All panelists : Thank you to NAAEE & First Lady Tammy Murphy (we love you!). I'm sorry that I have to sign off. Please check out resources for educators, including CC lessons at <http://njseagrant.org/education/resources-for-educators/>. Wishing you all a great rest of the summer :)

15:02:19 From Marc Rogoff : <https://www.njtvonline.org/programs/njtv-learning-live/erosion-avengers-jill-falk-fourth-grade-ouqmsg/> NJTV Learning Live - features sea-level rise and resiliency

15:02:57 From Christine Key : Yes you did Mr. Bitten, you made such an impression on the students at RIH district!!!

15:03:54 From Mark Pankau to All panelists : I am part of VA EE with our local LEEA county organization. We are thinking of a combined LEEA organization and High School Student EE Summit. We are just now in the thinking stage for program. We welcome ideas.

mpankau28@gmail.com

15:04:18 From Kathleen Blazewicz : This was such a great meeting. Thank you so much for organizing this.

15:04:30 From Kathleen Blazewicz : Thank you to the participants.

15:04:57 From Heather Killen : For a watershed action and education model look at the Watershed Steward Programs associated with the Chesapeake Bay.

15:05:07 From Heather Killen : <https://www.mdsg.umd.edu/topics/watershed-stewards/watershed-stewards>

15:05:19 From Beverly Murdock : I agree with Hank, climate change information and education is effective when delivered in context. Impacts to parks can be measured. Changes in plants moving upslope in alpine environs can be measured, documented and communicated. No need to be dramatic, just state the facts. As far as the international piece, I say use migratory birds as a vehicle. Great way to connect. Students from Minneapolis will have pen pals in Costa Rica and one student sees the bird in February...another documents same birds in May. Also use personal stories, I worked at Ginnell Glacier in Glacier NP and took Al Gore up there when he gave a speech on climate change. Share information, make it compelling.

15:05:27 From Batool Ishaque : Getting real good ideas from this webinar and also happy to be satisfied by comparing what's happening in the developed countries and what we are doing in Pakistan, being a small Training institute Early Years Learning And Research <https://www.facebook.com/earlyyearslearningandresearch/> along with weekly Nature-based program, we are doing a lot of the similar things what the rest of the countries are doing.

15:05:55 From Judy Braus : Thanks to all our international participants for sharing what you're focused on and how we can work together.

15:06:04 From Susan Marie Terra to All panelists : This was a great experience! Thank you all for your time and sharing your knowledge. Will future webinars be planned so we can continue this conversation and share resources?

15:06:29 From Emily Fano : The National Wildlife Federation's Resilient Schools Consortium (RiSC) program and curriculum (designed by teachers for teachers) educates middle and high school students about climate science, climate impacts, and strategies for resilience. It empowers them to take action in their schools and communities through solutions-oriented projects. The first version of the curriculum, including slide decks, can be accessed at <http://www.riscnyc.org>

NWF's Climate and Resilience Education Task Force in New York City (that includes NOAA and many other partners) is working on several projects including a teacher climate education survey that will assess the landscape of climate education in NYC K-12 schools. We're working with our partners, WeACT for Environmental Justice, Global Kids, and others to ensure that climate equity and justice are embedded in planning and curricula. For questions about any of this work please email fano@nwf.org. Thank you for this webinar and to all of you for your amazing work!

- 15:06:49 From Heather McCall to All panelists : You can read more about the Highland Park tree project (and more) mentioned by Tracey on the Highland Park High School Sustainable Jersey for School Bronze certification report.
http://www.sustainablejerseyschools.com/actions-certification/participating-districts-and-schools/certification-report/?tx_sjcert_certification%5Bcertification%5D%5B_identity%5D=444&tx_sjcert_certification%5Baction%5D=show&tx_sjcert_certification%5Bcontroller%5D=Certification&cHash=8b297be7b253f12d1240b58dbded77f0
- 15:06:53 From Michele Joseph to All panelists : Thank you Rezwan!
- 15:07:14 From Debbie Mescal : Tracey, where can I find digital program
- 15:07:16 From Frank Niepold to All panelists : On page 7 of the America's Pledge 2019 report you can see all the important sub national work;
<https://assets.bbhub.io/dotorg/sites/28/2019/12/Accelerating-Americas-Pledge.pdf> .
- 15:08:27 From J. Williams : Connected to sustainability, teachers, think about registering to a global network of TeachSDGs teachers, at <https://www.earthproject.org/> and join 500,000 participants on their quest to explore, brainstorm, create, discuss and share on the topic of climate action for 6 weeks in October 2020.
- 15:08:32 From Louise Ammentorp : Our FB page for TCNJ Environmental Sustainability Education- We post about our programs and PD and other resources.
https://www.facebook.com/groups/TCNJENVVSUS/?epa=SEARCH_BOX
- 15:09:11 From Heather McCall to All panelists : The Digital Schools program will be officially launched and included in the Sustainable Jersey for Schools certification program beginning in January 2021. Visit www.sustainablejerseyschools.com for more information. This is an integration of the former Future Ready Schools NJ program with Sustainable Jersey for Schools program serving over 960 schools in 60% of all districts
- 15:09:36 From MICHAEL CHODROFF to All panelists : Bravo to all. Thank you.
- 15:10:30 From Lolita Kiorpes : @Louise that link just takes one to a sign-in facebook page not the specific one you mention
- 15:10:44 From Don Haas to All panelists : All the major problems society faces are highly interdisciplinary yet schools are incredibly disciplinary. We need to change that.
- 15:10:57 From Claudia Angle : Thank you all!
- 15:11:01 From Tracey Maiden : Thank you Heather for answering the question
- 15:11:13 From Frank Niepold to All panelists : Thanks everyone!
- 15:11:14 From Don Haas to All panelists : Thanks all!
- 15:11:20 From Betsy Freeman : Awesome job, all! Thank you!
- 15:11:24 From Paul Soltis to All panelists : Historical musician Linda Russell offers a performance on "Songs of Nature and the Land" linking history, nature, and the conservation movement: <http://www.lindarussellmusic.com/shows>.
- 15:11:27 From Louise Ammentorp : Sorry - hopefully this will work
<https://www.facebook.com/groups/TCNJENVVSUS/>
- 15:11:35 From Kelly Wenzel to All panelists : Thank you panelists and Judy and NAAEE for organizing this forum! NJ - more than just the Turnpike!
- 15:11:36 From Jen Nigro : Thank you So much

- 15:11:36 From Laura Lano : Thank you!
- 15:11:37 From Stacie Pierpoint to All panelists : Bravo to you all!
- 15:11:37 From Jennifer Webb to All panelists : Thank you all for this panel!!!
- 15:11:42 From Beverly Murdock : Great webinar, lots of useful resources
- 15:11:44 From Kristen Tomasicchio to All panelists : great panel, thank you!
- 15:11:46 From Lolita Kiorpes : You are most welcome! Thank-you!!!
- 15:11:48 From Denise Hernandez to All panelists : Thank you!!!
- 15:11:48 From Melissa McCutcheon to All panelists : Thank you!!
- 15:11:51 From Holly Theobald : Thank you!
- 15:11:55 From Brock Adler : Thanks all!
- 15:11:57 From Mehak Zahra : This was amazing!
- 15:11:58 From Lane Britten : Thank you all!
- 15:12:02 From Louise Ammentorp : thank you!
- 15:12:03 From Joanna Hanrahan : Please can I upload this webinar on my website
www.sustainablebridgewood.org
- 15:12:04 From Julie Hornsby to All panelists : THANK YOU!! So awesome to see the work y'all are doing :) I hope to spread it across the South.
- 15:12:14 From Christina Overman to All panelists : Thank you so much! This was terrific!
- 15:12:15 From J. Williams : Thank you! I look forward to receiving a follow up email with a recording of this webinar.
- 15:12:16 From Emily Fano : Thank you all for your leadership!!!
- 15:12:17 From Laura Landau to All panelists : What is the best way to do this virtually?
- 15:12:23 From Christa Delaney : Thank you so much!
- 15:13:52 From Christine Westra to All panelists : So encouraging! Thank you for this event. Peace, Joy and Many Blessings to all, Best Health!
- 15:13:52 From Judy Braus to All panelists : Great job, everyone. What a wonderful panel! You were all super stars! Seriously. Such important work! Thank you all! We are so honored to have you all!
- 15:15:01 From Susan Marie Terra to All panelists : Thank you!!!!
- 15:15:06 From Tammy Murphy to All panelists : Thank you, thank you, thank you all. You were wonderful and I am grateful. Stay safe and hope to "see" you again soon.
- 15:15:11 From Kelly Wenzel to All panelists : If you are in NJ join the Alliance for NJ Environmental Education at ANJEE.org.
- 15:15:18 From Tracey Maiden to All panelists : This was truly an honor, thank you allowing me to be a great part of the discussion
- 15:15:24 From Missy Holzer to All panelists : thank you
- 15:15:24 From Robin Duym to All panelists : Thank you!
- 15:15:25 From Michele Joseph to All panelists : thank you
- 15:15:28 From Betsy Freeman : Thank you NAAEE!
- 15:15:30 From Farwa Tassaduq : Thank you!