



Engaging Minority University STEM Education Professors in the Science of Climate Change



ELIZABETH CITY
STATE UNIVERSITY





Goal



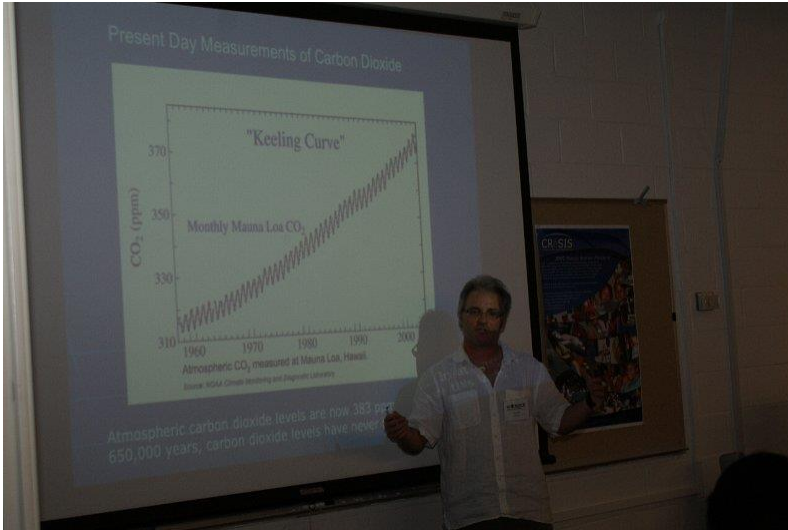
- Empower faculty of education programs at Minority Serving Institutions to better engage their pre-service teachers in teaching and learning about global climate change through the use of NASA Earth observation sets.
- Key Element – Summer workshop that provided the faculty with approaches to understanding climate change and its impacts on terrestrial and ocean ecosystems.

Summer Workshop 2012



Delaware State
Elizabeth City State
Grambling
Hampton
Jackson State

Johnson C. Smith
Mississippi Valley
Morgan City State
Norfolk State
St. Augustine



Summer Workshop 2013



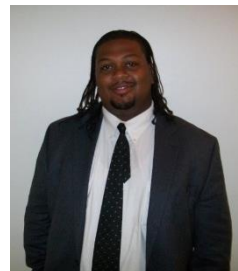
Alabama A&M
Alcorn
Delaware State
Elizabeth City State
Grambling
Fort Valley State

Jackson State
Norfolk State
Texas State
Tuskegee
Virginia Union





Dr. Waneene Dorsey
Grambling University



Kaiem Frink
Virginia Union University



Dr. Ervin Howard
Elizabeth City State University



Dr. Loretta Jagers
Grambling University



American Geophysical Union San Francisco, CA (Dec. 2015)

Climate Literacy: Approaches to
Multidisciplinary Climate Education
in Higher Education Institutions II

Primary Conveners

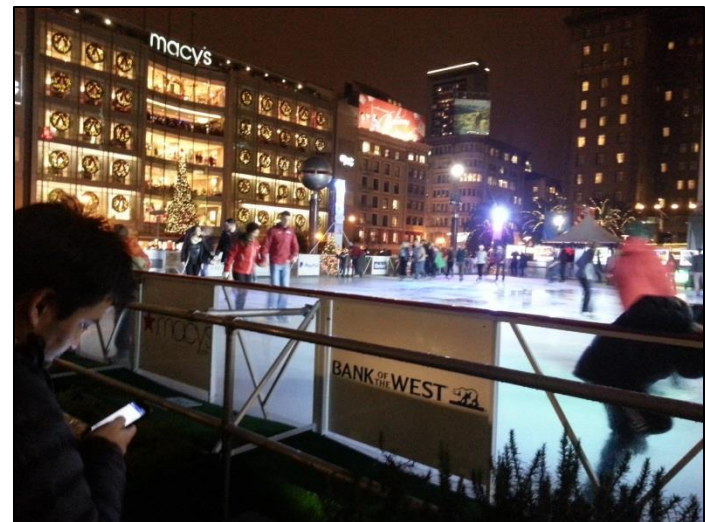
[Monica Bruckner](#) Carleton College

Co-conveners

[James Byrne](#) University of Lethbridge

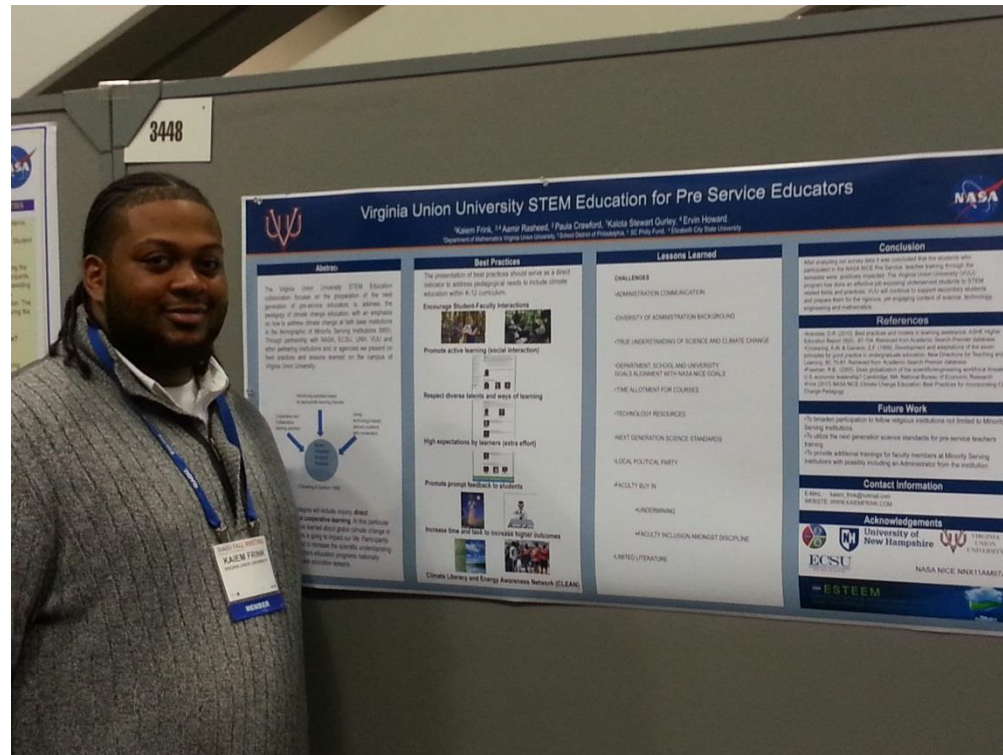
[Stephen Hale](#) University of New Hampshire

[Leanne Little](#) University of Lethbridge



American Geophysical Union San Francisco, CA (Dec. 2015)

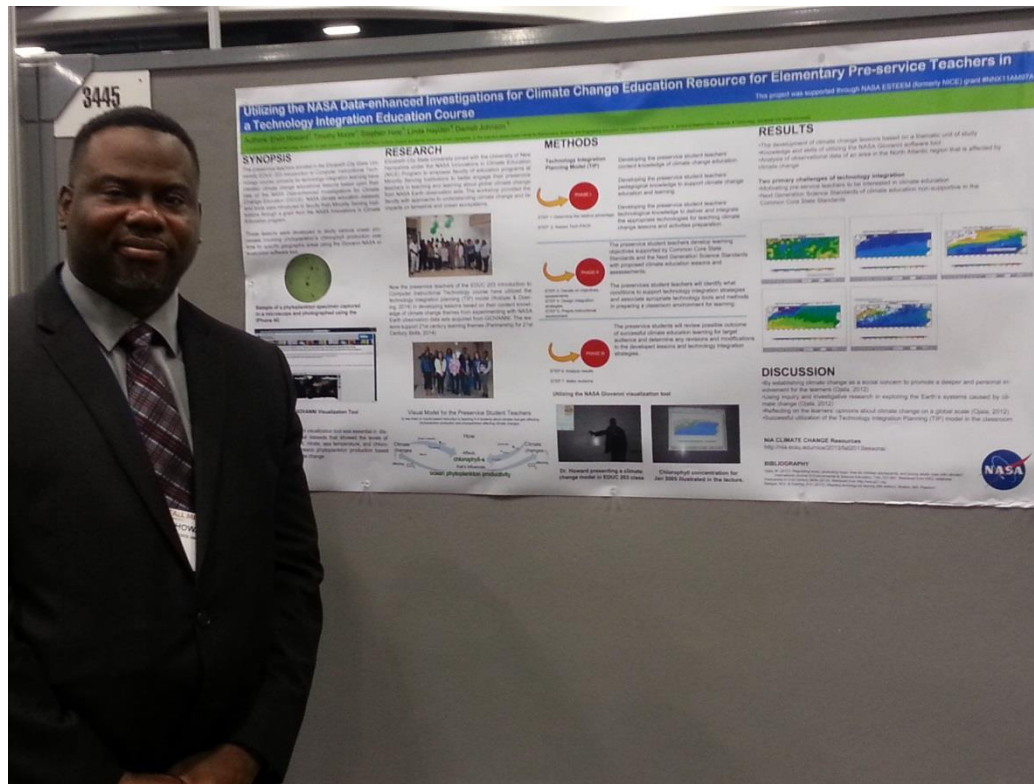
ESTEEM - Posters



Frink, K. 2014. Virginia Union University STEM Education for Pre-service Educators. Fall Meeting of the American Geophysical Union. San Francisco, CA.

American Geophysical Union San Francisco, CA (Dec. 2015)

ESTEEM - Posters



Howard, E. 2014. Utilizing the NASA Data-enhanced Investigations for Climate Change Education for Elementary Pre-service Teachers in a Technology Integration Classroom. Fall Meeting of the American Geophysical Union. San Francisco, CA.

American Geophysical Union San Francisco, CA (Dec. 2015)

ESTEEM - Posters



Jaggers, L. 2014. Pre-Service Teachers Enhance Climate Literacy in Writing Children's Books on Climate Literacy Concepts and Implementing Related Activities in the PK-12 Classroom. Fall Meeting of the American Geophysical Union. San Francisco, CA.

American Geophysical Union San Francisco, CA (Dec. 2015)

ESTEEM – Oral Presentations



Dorsey, W. and T. Moore. 2014. Using NASA DICCE GIOVANNI to Prepare Pre-service STEM Teachers to Teach Climate Science. Fall Meeting of the American Geophysical Union. San Francisco, CA.

American Geophysical Union San Francisco, CA (Dec. 2015)

ESTEEM – Oral Presentations



Ozbay, G. 2014. Collaborative Education in Climate Change Sciences and Adaptation through Interactive Learning Fall Meeting of the American Geophysical Union. San Francisco, CA.

For more information about this ESTEEM project

The screenshot shows a web browser window displaying the NASA ESTEEM website. The browser's address bar shows the URL <http://nia.ecsu.edu/nice/>. The website header features the NASA logo and the text "ESTEEM Earth Systems, Technology and Energy Education for MUREP Minority University Research and Education Project Formerly NASA NICE". A navigation menu includes links for ESTEEM (NICE), NASA, NIA, CERSER, UNH, and ECSU. The main content area is divided into several sections:

- Home**: Engaging Minority University STEM Education Professors in the Science of Climate Change. Elizabeth City State University has joined with the University of New Hampshire under the NASA Earth Systems, Technology, and Energy Education for MUREP (NASA ESTEEM).
- News**: Virginia SpaceLink Newsletter, Summer of Innovation Grants.
- Upcoming Events**: NICE Calendar, NICE Webinars.
- Recent Events**: 2014 AGU, NOBCChE STEM, NICE @ Grambling, 2014 Planning Meeting, 2013 AGU, 2013 PI Meeting, 2013 Climate Change Workshop, 2012 AGU, GSU Presentations, 2012 Recruitment Trip for Cohort 2.

A detailed description of the ESTEEM project is provided: "NASA ESTEEM, formerly NASA Innovations in Climate Education (NICE), is a competitive project that promotes climate and Earth system science literacy and seeks to increase the access of underrepresented minority groups to science careers and educational opportunities. Since 2008, ESTEEM has funded 75 education projects across the country that leverage NASA's unique contributions in climate science, including Earth observation data and Earth system models, to reach teachers and students. Through these efforts, the portfolio of ESTEEM projects advances our understanding of how to effectively teach global climate change concepts, increase public climate literacy, and contribute to the development of a diverse future workforce in climate-related sciences. The NASA ESTEEM project, managed at Langley Research Center in Hampton, VA, includes a portfolio of 75 climate education initiatives that span across the nation and contribute to the development of a climate-literate public and a climate-related STEM workforce. More information on the projects can be found in the 'Project Portfolio' section of the ESTEEM".

The browser's taskbar at the bottom shows the Windows Start button, icons for ResearchWeek_20... and NASA Esteem (NI...), and the system tray with the date 4/13/2015 and time 7:36 AM.

<http://nia.ecsu.edu/nice/>