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### Theory to practice: Disseminating climate change sciences

The Intergovernmental Panel on Climate Change (IPCC), established by the United Nations and World Meteorological Organization, has determined with a 90% confidence interval that humans have very likely influenced a net warming to the Earth from the increase of greenhouse gases, aerosols and land use changes. This warming has caused the amount of ice on Earth to continue to decrease and sea levels to rise. In addition, extreme precipitation events are happening more often in selected regions. How can we engage students and increase attention and interest for more information on these facts? Student learning can be fostered in classroom settings. Modelling programs support assessments for water supply, coastal zone and tropical cyclones. How can we reach out and increase community interest? How can we connect people with what is happening locally and how this is linked with the global trends? The last few decades have seen tremendous efforts collecting and distributing scientific data to better understand trends and future projections/scenarios of climate change and how to adapt to those changes. As science advances, societal awareness growth remains a puzzle. How we teach our youth will help them to educate others. This will allow effectiveness as they serve as growth models to their family members and society. Is there understanding in public knowledge of climate change? People drive political motivations. An informed public, from students to family and friends, can influence political decisions. Potential polluters have political motivations to portray climate change as an illusion. Clear communication of scientific knowledge can empower people to safely steer future generations out of harm's way – sharing understanding fosters more of the same.

### Biography

Dr. Ozbay is a Professor in the Department of Agriculture and Natural Resources in Delaware State University. She is appointed primarily for research and her research interests are in the area of habitat restoration and water quality issues, specifically water quality driven toxicity in harmful algae, shellfish-algae dynamics, nutrient and water quality management, heavy metal contaminants, aquatic ecology and bacterial monitoring. She received her Ph.D. in Fisheries and Allied Aquacultures at Auburn University, Auburn, Alabama in 2002. She conducted research leading to the development of aquaculture effluent water quality standards for the U.S. Environmental Protection Agency as her Ph.D. project. Dr. Ozbay has advised 15 graduate and over 50 undergraduate students and has served on 15 additional graduate students' committees. She has received several outstanding researcher awards at the national, regional and institutional levels. She serves as an Editorial Board Member for the five different journals and former Executive Board Member for Atlantic Estuarine Research Society. She also serves in the Research Advisory Committee for NOAA-LMRCSC and Technical Advisory Committee for the Northeast Aquaculture Center, currently as co-chair. She has also been honored by an appointment from the Secretary of the Delaware Department of Natural Resources and Environmental Control as a member of the Delaware Climate Change Vulnerability Assessment Steering Committee for the State of Delaware.

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