

**WOMEN IN SCIENCE:
FIELD-BASED LEARNING WITH MARGIE TURRIN**

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Summary:

On February 16, 2022, the New York DEC's Hudson River Program hosted Margie Turrin in their winter speaker series (NYSDEC, 2021). I chose this particular webinar as research for a grant project where I am on the guiding coalition. Field-based learning has shown remarkable results with educating the public on global climate and, in reference to this course, ocean literacy. Margie Turrin spoke of her interaction with the education system in Greenland and how she began making changes to an antiquated program that was teaching outdated false information (2022). The current education system was not teaching the native students of Greenland actual facts that Greenland is actually rising, not becoming flooded from ocean level rise (Turrin, 2022). Hmmm. Greenland is rising?

I had the same misconception. Whenever I taught about climate change in my own classroom, I taught about sea level rising. I didn't consider the effect of the loss of mass from glaciers, nor the fact that the mass of the glacier actually pushed the plate the land mass was on down into the softer mantle as well as the effect of the gravitational force on the ocean from the huge ice sheet which actually pulled the water towards it (Turrin, 2022). I was intrigued. Turrin explained that her team of researchers from Columbia University and the Greenland Institute of National Resources have been working with the 4 local Greenlandic communities in a Citizen Science and Field-experience Learning Program with the local schools to monitor weather, tidal changes, wildlife changes, ... all the coastal changes in Greenland (2022). What is even more impressive is the program is presented in Greenlandic. The researchers embraced the culture of the local natives allowing them input and the power to control what happens with their environment. Because of the trust and understanding built by the team, the project has been a huge success. The communities, the youth, the elders, and the partners are identifying and quantifying the changes occurring in port access, fisheries habitat, and hunting grounds as the ice sheet melts decreasing

the weight holding Greenland down and the gravitational force pulling the ocean to the land thereby rising it to new heights and affecting the economy of Greenland natives (Passow, 2021).

Turrin and her team have shown students how to collect the data, make detailed observations, and interview their elders (2022). They have empowered these youth and built bridges to the community. The students collect daily data as part of their contribution to the community making them feel a part of the future(Turrin, 2022). I wonder how different the American education system would be if we embraced the differences found in our communities and created meaningful interactions as an integral part of education. In working with the guiding coalition for our Susquehanna Valley Watershed Project, I am already running into resistance. I'm wondering how our team will be able to build those bridges to reform education, community service, and helping in building ocean and climate literacy.

References:

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- Turrin, M. (2022, February 16). *Field-based Learning Connects and Empowers Students*. New York State Department of Environmental Conservation. <https://neiwpc.org/2021/12/15/women-in-science-speaker-series-features-leaders-in-science-and-education/>