

## As Long As Someone Like You Cares a Whole Awful Lot

“Unless someone like you cares a whole awful lot, nothing is going to get better. It’s not” - The Lorax.

This is Lori Siegel’s favorite quote, and she takes it to heart. She understands the importance of her voice, and specifically, how, she wants to use it to contribute to the world.

Lori Siegel grew up in Providence, Rhode Island, and since she was little, loved math and science. She was the kind of child that loved to take apart things and try to understand how they were built. For her numbers are worth more than words, they are things she can rely on to make sense of the world.

After going to Tufts University as an undergraduate and getting her masters there, she worked at an engineering firm on groundwater and soil contamination, and then went to Northeastern University for her Ph.D. But Siegel wasn’t interested in the funded Ph.D. research project she was doing. Luckily for her, she was able to find a different project that she was more passionate about. This was the first time Siegel learned about system dynamics analysis and she loved it.

Then for a while, she worked as an ecological risk assessor. However, reading through journals and research papers, she became more and more personally concerned about Climate Change. And one day as she was doing some consulting work, she learned about an organization doing the sort of work on Climate Change that interested her and contacted the head of the organization about how she could contribute with the kind of modeling she was doing. For two years Siegel consulted for the project and by the end, the project had become big enough to become its own company, Climate Interactive.

Currently, Siegel is a senior modeler for Climate Interactive, a small non-profit organization committed to helping more people understand what Climate Change is and what needs to be done to mitigate it. One way they do this is by making interactive tools, that anybody can easily access from the Climate Interactive website for free. She uses differential equations to see how certain things such as having a coal tax might affect the climate. The aim is to make the complicated science behind Climate Change more simple so that whether science oriented or not, anyone can understand. And in 2013 Siegel and her team were able to win the Best "Real World" Application of System Dynamics Award from the System Dynamics Society for their tool, C-Roads.

Furthermore, Siegel especially stressed the importance of people learning for themselves. “That’s the whole part of interactive.” After she finishes all the computing and calculating necessary for creating the programs, she shows her tools at local elementary schools, middle schools, high schools, and any other interested party. The only continent she and her team still haven’t gone is Antarctica! Siegel also reached out to the

teachers at my middle school a few years ago and taught them how to use the program. And since, they have been teaching 7th-grade students at my school, Frances C. Richmond Middle School, about Climate Change, by doing a mock Climate Summit using C-Roads. As a student who really enjoyed the experience last year, I was so surprised and excited when I learned during our interview that she was one of the people who had helped start the project!

Siegel loves the work she does today. As someone who has loved math and science since she was little, it's a dream job. The topic of Climate Change includes so many different areas of science, and then on top of that, she can use mathematics to help calculate the exact impact of certain things. And she loves how modeling challenges her. When I asked her about a challenge she currently faces, she told me how hard it is to stop working, especially when she is so passionate about what she does and in times when she is so close to finishing. For her modeling is a puzzle, so when she's that close to finishing, she can't just leave the last piece floating around.

She gives advice to any student interested in pursuing a career in math, or any other field, "If you love it, there's no reason that you won't be able to achieve your goals. If you hit up against blocks, go through them. Be confident, and show that you have a voice."

Like the Lorax, Siegel is passionate about protecting her environment, and she strives every day to use her voice so that more people will become aware of Climate Change and its effects. And she doesn't give up because she knows that though we must start acting soon in order for Climate Change to be mitigated, like the Lorax, she knows that it is possible, there is still a seed of hope left, as long as someone, someone like you, cares a whole awful lot.