

Climate Change Education for K-12 Students

By: Samantha Schepelenko

Climate change education is the process of teaching students, especially younger students in K-12 classrooms the importance of understanding climate change. Starting education on this topic at a young age can encourage students to change their attitudes and behaviors towards climate change in the future according to an article from the [United Nations](#).

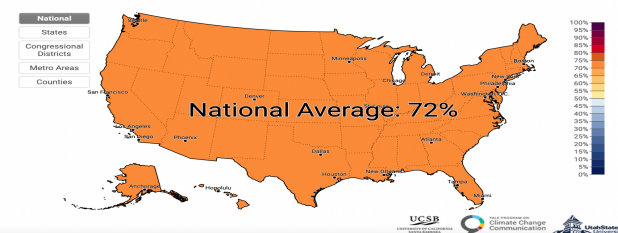
The article entitled “Education is Key to Addressing Climate Change” from the United Nations emphasizes how powerful education can be, “Education empowers all people, but especially motivates the young to take action. Knowing the facts helps eliminate the fear of an issue which is frequently colored by doom and gloom in the public arena.”

The effects of climate change show up around all of us everyday and the importance of teaching climate change has never been more crucial. Educating the youth on something that will massively impact their futures should be a priority, and for leaders in many states it is not something of importance, which is cause for concern. 72% of adults in the nation believe climate change is happening according to the [Yale Program on Climate Change](#). Why is there not more of a push to educate the youth about this climate crisis?

Estimated % of adults who think global warming is happening (nat'l avg. 72%), 2021

Select Question: Global warming is happening Absolute Value

Click on map to select geography, or:



Percentage of adults who believe global warming is happening in America from Yale Climate Opinion Map- 2021

With the help of a program called Next Generation Science Standards (NGSS) changes in classrooms not only in New Jersey but all around the world are happening. NGSS are important new standards which encourage students to take a deeper look into the world of science and all it has to offer.

The NGSS has eight practices it adheres to, which includes asking questions and defining problems, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations and designing solutions, engaging in argument from evidence and obtaining, evaluating and communicating information.

The importance of the NGSS were emphasized by Dr. Lauren Madden, a professor in the Elementary and Early Childhood Education Department and the coordinator of the Environmental Sustainability Education Minor at The College of New Jersey.

“The NGSS, at least in the science side, gave glimmers of hope,” said Dr. Madden, referring to having hope that one day climate change would be incorporated into everyday interdisciplinary curriculum for K-12 students.

In June 2020 New Jersey became the first state in the US to incorporate climate change education in K-12 classrooms. “I was extremely pleasantly surprised with these standards that came from the state, ” said Dr. Madden.

Before incorporating these climate change laws into the interdisciplinary curriculum teachers would try their best to instill the idea of climate change into their classrooms; through science and social studies classes.

“There were definitely instances of teachers mostly in science, social studies and math who have always been interested in climate change even before it was required in the curriculum. For example, a former student of mine who is a social studies teacher had their 5th grade students write letters to elected officials to try and change policies and some of them did their own research and decided to write about climate change.” When teachers take matters into their own hands and teach students lessons like this about climate change they are showing students they have the power to make a difference and use their voice.

In a climate change education [report](#) prepared by Dr. Madden entitled “Report K-12 Climate Change Education Needs in New Jersey” there was a comment from Dr. Lawrence S. Feinsod and Randall Solomon, who are the Executive Directors of the New Jersey School Boards Association and Sustainable Jersey, regarding New Jersey and the importance of climate change education. “New Jersey has long been a leader in public education, and continues in this tradition with the incorporation of climate change education in instruction for K-12 students. In doing so, the state’s students will be better prepared to contend with the global warming crisis and prosper in the green economy of the future.”

Since September 2022, the new climate standards were officially implemented into classrooms across New Jersey. There is hope that NJ can serve as a model for other states to implement

changes as well. In the climate change education report from Dr. Madden, she tells a vision for the future of New Jersey education, “Ensure that all teachers, students and educational leaders in New Jersey understand climate change and are empowered to develop solutions to climate-related problems.”