

## Position Statement

Approved by the  
CASE Board of Directors  
September 12, 2015



## Climate Change

There is broad scientific consensus that the Earth's climate is warming and the observed increase in warming over the past several decades is attributed to human activity. Moreover, climate change is one of the greatest scientific challenges this generation of students and teachers will face. The California Association of Science Educators understands that

1. the Earth's climate is changing,
2. the evidence demonstrates recent warming is the result of human activities, and
3. there are direct impacts already observable in California.

As science educators we recognize that we have a responsibility to help students understand the evidence, impacts, and possible solutions of climate change.

The newly adopted Next Generation Science Standards (NGSS) call for the teaching of climate change, human impacts on natural systems, and human sustainability throughout multiple grade levels and disciplines. As a result, science teachers will be asked to teach to these topics to prepare their students for the challenges ahead; addressing not only the causes and impacts of climate change, but how science and engineering can help solve problems and inform policy. CASE recognizes that climate change as represented in the NGSS is an ideal opportunity for students to learn how scientists understand and model the Earth system in the past, present and future, as well as how society can engineer sustainable energy systems, conservation measures and other key solutions to mitigate and adapt to climate change.

CASE supports educators in providing an educational experience that maintains the integrity of science education as evidence-based. This includes recognizing that engaging in argument from evidence is an important practice in science, while distinguishing between empirical evidence and opinion. It also allows students to engage in discussions about climate change that mirror how scientists ask questions and interpret evidence to form explanations for complex questions about the mechanisms and effects of climate change. Teachers have a responsibility to accurately represent the questions that scientists are asking, and share the evidence and scientific reasoning. Though climate change can be perceived as politically controversial by some, CASE does not advocate the omission of content or presenting misinformation, such as assertions against the human influence on climate change, in what may be mistakenly considered providing alternate points of view. These positions ignore empirical data and misrepresent the science.

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