

City of Cambridge
CLIMATE PROTECTION ACTION COMMITTEE

RECOMMENDATION

Climate Change in the Public School Curriculum

August 2013

The Climate Protection Action Committee (CPAC) is an advisory body to the City Manager on climate protection issues and implementation. Last Fall, CPAC was visited by Kristen Von Hoffmann and Lisa Scolaro from the School Department. Based on their presentations and subsequent discussion, CPAC has several recommendations.

Based on presentations to CPAC from School Department staff and conversations with some teachers, it is CPAC's understanding that the Commonwealth does not currently have standards for school curricula that prepare children for climate change. At Cambridge Rindge & Latin School, there are a number of elective courses in ecology, advanced placement environmental science, and independent projects where climate change comes up. This seems to be based on teacher interest. For example, in 2008 teacher Sara Colby organized "Global Community Project: The Climate Change Year", which was a school-wide focus on climate change. Through communication with Kristen Von Hoffman and various teachers, CPAC is aware of much of the School Department's sustainability-related efforts. We do not yet see an integrated and holistic approach to climate change education in the Cambridge Public School system.

While not currently included in national and state standards for school curricula, new draft national frameworks (the Next Generation Science Standards being developed by the National Research Council, National Science Teachers Association, American Association for the Advancement of Science, and Achieve) include numerous and specific references to climate change, suggesting that climate change and sustainability are likely to be incorporated into curricula in the future.

Given the importance of climate change to youth, CPAC believes that climate change must be addressed through all disciplines – the physical and natural sciences, of course, but also the humanities and social sciences – and in pre-school through high school. Today's students will be instrumental to current and future efforts to mitigate and adapt to climate change. Their lives, including their emotional development, will be highly affected by it. CPAC is cognizant of the many and diverse demands placed on our public schools, teachers, and students. Nonetheless, this topic is of such great importance, labeled an emergency by the Cambridge City Council, that it warrants immediate attention.

As part of its recommendations relating to public engagement in and education about climate change, CPAC recommends that the Cambridge Public Schools not only identify and implement best practices in climate change education from other school systems, but that it also explore playing a leadership role in developing, adapting, and sharing educational approaches to climate change as part of the City's broader effort to address climate change. CPAC would recommend looking both nationally and internationally, seeking external help from experts in the field of climate change education curriculum and practice, and leveraging the considerable resources in Cambridge to help the school department contribute as an innovator and leader in climate change education.

CPAC members offer the following additional ideas to help stimulate thinking, both about content and process, even as we recognize that some, perhaps many, of these notions may already be included in some aspect of the schools' programs or plans:

- Action should be swift; this issue is both an excellent opportunity for integrated learning across a broad range of disciplines and an urgent topic for all of us.
- Climate change preparation/education may play out in many aspects of the school's program, from curriculum, to teaching practices, to clubs, teacher professional development, programs outside of class-time and outside the classroom, and more.
- Decision-making will likely require input from individual school, CPS District and School Committee administrators, so all should consider our recommendations and coordinate efforts.
- Equip students to cope with the misinformation, particularly about science, that is at times introduced into the public process by advocates devoted to particular opinions or positions. Ensure that students (and teachers) know about the high degree of scientific consensus on the large scale of human impact on our ecosystem as well as the nature of outstanding questions and areas of research.
- Explore what kinds of skills, attitudes and knowledge are appropriate for and developmentally essential to students of all ages and identify whether those needed to understand and address climate change are different from, and productive additions to, those already targeted as our system's educational goals.
- We are all a product of the society that created this challenge. Personal and professional development on the topic of climate change will be important for teachers, administrators and elected officials in order to address this issue effectively. We will need to understand the facts and think differently if we are going to create an educational system that equips children to respond effectively to climate change.