



D.C. Everest Area School District
6500 Alderson Street, Weston, WI 54476



To: D.C. Everest Area Schools' School Board
From: Scot Abel – Science Curriculum Coordinator
Date: August 22, 2014
Re: Request to adopt Next Generation Science Standards for K-12 Science

In the years since the 1990s when Wisconsin and D.C. Everest adopted our current set of Science Academic Standards much has changed in science, society, technology, and education. Being a scientifically literate individual in the 21st century looks different than it did when our last set of standards were developed. Smart Boards have replaced chalk, Pluto is no longer a planet, we genetically engineer crops to be drought and disease resistant, and students now carry cell phones with more processing power than the monochromatic computers used to write those early standards. Students will face an increasingly scientific and technological society and some may find careers locally in such, as medicine, health care, advanced manufacturing, energy, paper and waste water treatment industries all serve as cornerstones within our district. While our dated standards have served our students well and our ACT scores in science are the highest they have been in nearly twenty years, we must continue adapting and making continuous curricular improvements for the children who learn here.

Schools across Wisconsin and the nation have been waiting patiently since the announcement in the late 2000s that contemporary, research-based standards would be developed by volunteer lead states in collaboration with science and education communities, to be offered to schools for voluntary local adoption. This was to be a two-step process. First, The National Academy of Science's jointly developed a "Framework for K-12 Sciences" with practicing scientists, Nobel laureates, cognitive scientists and science education researchers. After several revisions and public reviews the final framework was released in 2011. This framework was then used in the development of the "Next Generation Science Standards." This second step was led by stakeholders from 26 lead states, again consisting of scientists, educational researchers, academicians and educators. Support was provided by the Committee of the Chief State School Officers, Achieve, the American Association for the Advancement of Science, and The National Research Council. Again several drafts of the new standards were developed and, fitting with the philosophy of science and a democratic society, each draft was made available to the public for feedback by everyday citizens followed by revisions each time. The final set of standards, which place greater emphasis on hands-on problem solving skills where students are involved in authentic scientific investigations was released in mid-2013. Some of the groups who have expressed support for the new standards include the American Association of Mechanical Engineers, Council of State Science Supervisors, American Chemical Society, DuPont, Exxon Mobil, IBM, Cisco Systems, Microsoft Corporation, Raytheon, 3M, and various science teacher associations.

School districts across Wisconsin are now in various states of voluntary adoption of the new standards, many formally adopting them through their school board. D.C. Everest is at a pivotal point in this regard as the elementary level is preparing a process for science curricular revision and the secondary level is working toward full implementation of standards-based grading. Decisions regarding these endeavors hinge on the foundational standards of which our district's curriculum is developed. Parents and guardians always have the option to opt out of curriculum as requested.

It is with this that the district and its science department seek the support and backing of the school board to continue our work of ongoing curricular and instructional revisions and improvements using the *Next Generation Science Standards* as the foundation.

Additional Information

[Next Generation Science Standards](#)

[National Academies: A K-12 Framework for K-12 Science Education](#)