Position on the 2019 CT NGSS Assessment

In a few weeks, the Connecticut State Department of Education will be reporting the results of the new Next Generation Science Standards (NGSS) assessment. This assessment represents an important step in the State's implementation of these new science standards. The Connecticut Science Supervisors Association (CSSA) has been actively involved in the implementation of the new standards as well as providing input on the development of the NGSS assessments. Because of our active involvement in this process, we feel it is important to express our perspective on what this new assessment does and does not do.

Results reported to families and districts from the new test will look a lot like the Smarter Balanced reports. An overall scaled score will indicate if a student "does not meet the standard", "approaches the standard", "meets the standard", or "exceeds the standard". There will be a score for each of the three domains of the NGSS; Life Science, Physical Science, and Earth & Space Science. These scores will indicate one of three levels at which the student performed in these areas. There will be scores reported only for each Disciplinary Core Idea (DCI) for which there are a sufficient number of questions on the NGSS assessment. There will be no score or direct information provided on students' use of the Science and Engineering Practices (SEPs) or the Cross Cutting Concepts (CCCs). The SEPs reflect the major practices that scientists and engineers use to investigate the world and design and build systems. The CCCs are the overarching themes around which science is organized. Both the SEPs and CCCs are integral components of the NGSS.

The CSSA urges caution in using these scores to make curricular changes. Individual scores and building/district scores cannot be compared with results on the CAPT tests because they assess very different ways of knowing science. The current NGSS assessment represents only a limited snapshot of the science learning Connecticut students have accomplished. Additionally, because the test is administered only to students in grades 5, 8, and 11, the results span science learning in three or more grade levels. District scores should not be compared for this limited snapshot as individual districts may have different curricular sequences, which could impact scores in different ways, and all of the standards in the NGSS are not tested or reported.

The new Connecticut NGSS assessment represents an important step in the continuous improvement of science education in the state. The data provide a baseline from which districts can continue to build a comprehensive NGSS-aligned curriculum, but this baseline is only one measure of science learning. Combined with other, district level measures of science learning, the new NGSS assessment promises to be a valuable tool for Connecticut science teachers as they continue to provide outstanding science instruction and prepare our students for advanced studies, careers and citizenship.