Sometimes it’s good to go second. The Next Generation Science Standards (NGSS) have the advantage of coming after the tempestuous unveiling of Common Core standards in math and reading. Educators know many of the minefields to avoid. At the same time, NGSS is, in many ways, more ambitious than its predecessor and lacks some of the advantages that came with Common Core’s federal incentives and mandates.

Day two of the National Center for the Improvement of Educational Assessment’s (Center for Assessment) 19th Annual Reidy Interactive Lecture Series (RILS) focused largely on a key way to grapple with the new standards’ inherent complexity: a systems approach to assessment that emphasizes clarity and communication among constituencies that include teachers, students, district and state officials and the public.

“It’s a tricky balancing act to do this,” said Scott Marion, the Center’s executive director. It requires careful planning and an honest reckoning of the strengths, weakness and various capacities within the system.

Eighteen states and the District of Columbia have adopted the NGSS so far, and another 16 have adopted the 3-dimensional structure of the NGSS.

Delaware, one of the adopting states, has a key advantage: Most of its school districts share science curriculum voluntarily. That coherence extends beyond curriculum to encompass common approaches to professional development and classroom assessment.

That makes it an apt model for the utility of the systems approach.

“If one part of our system is off kilter, the whole system doesn’t work as it should,” said April McCrae, the education associate for science assessment and state STEM coordinator for the Delaware Department of Education.

She meets once a month with science education leaders throughout the state to discuss finances, changes and, notably, what classroom assessments are saying about how the new curriculum is working.
Good assessment data, she emphasized, can be vital when determining if a costly curriculum change is necessary. “Should we do that?” she asked. “What are we basing that on? Is it meeting the needs of our students? Is it just a matter of shifting the professional development around a little bit so it’s more next gen oriented? Or do students genuinely need a new curriculum?”

Focusing on large-scale assessments at the beginning of the process “can lead to corruption,” Marion added. The emphasis should be in the classroom, where testing can be used to be build capacity. Bill Penuel, professor of education at the University of Colorado Boulder described a collaborative research in the Denver Public Schools designed to improve curriculum, instruction, and classroom assessment. It is designed to build a coherent learning system and educator capacity at the same time.

Even though most states are not applying high stakes to their science assessments like they are with ELA and mathematics, that can be a matter of perspective.

“A district leader told me, ‘When the scores get printed in the paper, that’s high stakes to us,’” Marion said. “The stakes depend on where you’re sitting.”

Sean Elkins, a science instruction specialist for the Kentucky Department of Education, said the notion of a “formative assessment” doesn’t always sound benign to teachers when they hear it from state officials.

“Formative and punitive sound a lot alike,” he said.

For more news on the two-day event, including useful links and best practices, use hashtag #RILS2017 on Twitter and watch http://www.nciea.org in the coming days. To read our blog on the first day of RILS2017, go to http://www.nciea.org/sites/default/files/inline-files/RILS%202017%20day%201%20blog_1.pdf.