

# State Vignette

## Getting to Informational Text in Middle School Science



Andrea Isaacs, director of assessment at the State Department of Education, drove home from the last of a series of regional meetings the department had conducted for district content specialists in the six regions of the State. The meetings focused on implementation of college- and career-ready standards in the area of reading and writing, and in particular on the use of informational texts. In the final quarterly meeting, she and her team had introduced the *Assessment Design Toolkit*<sup>1</sup>, which districts might use not only to advance assessment literacy among teachers, principals and district personnel, but also to help them design items that measure students' abilities to read and comprehend complex texts and analyze texts with conflicting information on the same topic.

Most of the State's districts and content areas had been well-represented at the quarterly meetings Isaacs and her team had designed. Despite some initial skepticism about the department's efforts, everything had come together well, Isaacs thought. Her team's only disappointment was the low number of science educators who attended the meeting, which reflected the fact that few districts seemed to be working on improving the complexity of assessments in their science curriculum. In fact, most participants appeared focused on English and social studies only. As she pulled into her driveway, she realized this was odd, particularly since the State assessment office had recently released reports detailing consistently poor performance among middle school students on the State's science assessment.

She turned off the ignition, thought for a moment and smiled. She'd call Roberta.

<sup>1</sup>The *Assessment Design Toolkit* was developed under the auspices of the Reform Support Network, with funding from the U.S. Department of Education under contract #GS-23F-8182H.

The next morning Isaacs picked up the phone and dialed her former colleague, Roberta Martinez, a science content specialist in the district in which she was once a principal. Martinez quickly apologized for not attending the final regional content specialist meeting two weeks ago. "I'm talking to a few of my colleagues in the region," she told Isaacs. "We'd like our regional center to bring together the science directors from all the school districts to meet regularly, support each other and really dig into what college- and career-ready standards mean for science. There are understandably a lot of questions about how to teach the new standards and then how to assess them. We could really use your help."

Isaacs was thrilled. "Have you seen the *Assessment Design Toolkit*?" she asked Martinez. "We discussed it at the meeting you weren't able to attend a couple of weeks ago. We introduced it in all the regions, the last one yesterday. I'm betting if we introduced it to your colleagues at one of your next meetings they'd want to use it to help their teachers assess the new English language arts (ELA) standards."

"You know," responded Martinez, "they're always complaining about the science quizzes at the end of the chapters in their science textbook series. Maybe that's the hook. Maybe this is what can help teachers create something better. But where should we start?"

Isaacs emailed Martinez a [link](#) to the toolkit. Together, they looked at the overview of the 13 modules and talked about how the State and its regional offices might use it with science directors. After about 30 minutes of discussion, Martinez and Isaacs decided that it wasn't their decision to make; the best thing to do would be to share the modules with the science directors themselves and facilitate a conversation about how they might use the modules to achieve their goals.

“How can I help?” Isaacs asked.

A few days later Isaacs was on the phone with the regional director talking about the modules and the growing interest among science specialists to learn more and more about how to implement the informational text ELA standards in their science teachers’ classrooms. Isaacs had sent the director, Monica Lewis, a [link](#) to the modules and Lewis had viewed the first few.

“I tell you what,” Lewis said, if we can get Roberta and a couple of her colleagues to co-sign an invitation with you and me, I bet we’d get a great turnout. I’m happy to host a meeting with you here. Let’s see what kind of interest we can gin up for, well, let’s say a two-hour meeting.”

Several days later, the invitation was out, signed by Isaacs, Lewis, Martinez and three of her colleagues. The invitation included a [link](#) to the modules, which were now hosted on the Department of Education’s Website. It also included the request that each science specialist watch the introductory module and the modules on the five elements of assessment design in advance of the meeting. At the meeting, they would view portions of the three modules on item development. Participants were told that the subject of discussion would be whether they could use the modules as a tool to help science teachers assess the ELA standards and in particular the use of informational texts.

Isaacs viewed the room with satisfaction. Nine of the region’s 12 science directors were in attendance. Lewis welcomed everyone and Martinez facilitated the meeting. She began by asking what their key takeaways were from their viewing of the modules.

“I appreciated the way they explained how validity and reliability could be achieved by observing five elements of good assessment design,” said one specialist. “That makes a lot of sense to me and let’s teachers know they don’t have to be academics to design great assessments.”

“And I particularly appreciated the explanation about the different types of assessment items,” said another.

“I’m looking forward to watching the specific modules on selected response, constructed response and performance tasks. Those modules and the modules on alignment and rigor are where the rubber really hits the road for our teachers, I think, where we can really get down to talking about how we can teach and assess these new standards,” said a third.

Isaacs noted the nods of affirmation.

After more conversation and excitement about assessment items, the specialists and teachers watched clips of the three modules that Isaacs and her staff at the department had put together especially for the meeting.

“You see,” said one specialist. “We’ve got to figure out what a great multiple choice item or a great constructed response item looks like in the context of these informational text standards. That’s what’s tough. That’s what we’ve gotta get at.”

“Yeah, it’s item development that is really going to help us support teachers teaching to these new standards. It’ll help them know if students are really learning what they’re teaching them. Or if they’re teaching the right things.”

“The die appear to be cast,” Isaacs thought. “It looks like our job in this region could be to help science specialist advance assessment literacy and the new informational text ELA standards through the development of great items that measure what we need them to measure.”

She was already contemplating how she might use a similar process to engage science specialists in other regions of the State. Though they might decide to focus on other modules or even to delay their use, she liked the idea of introducing the modules as she and her colleagues had today.

She watched and listened as the discussion continued. She thought of the important work ahead.