Instructional Spotlight: A Student View of the New Science Standards

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Overview

In 2016, a K-12 Science Steering Committee was formed to look at current practice and to develop a vision for Science education in Shrewsbury. Shortly thereafter the Department of Elementary and Secondary Education (DESE) formally adopted new Science standards, and the work to align our curriculum to reflect new priorities began.

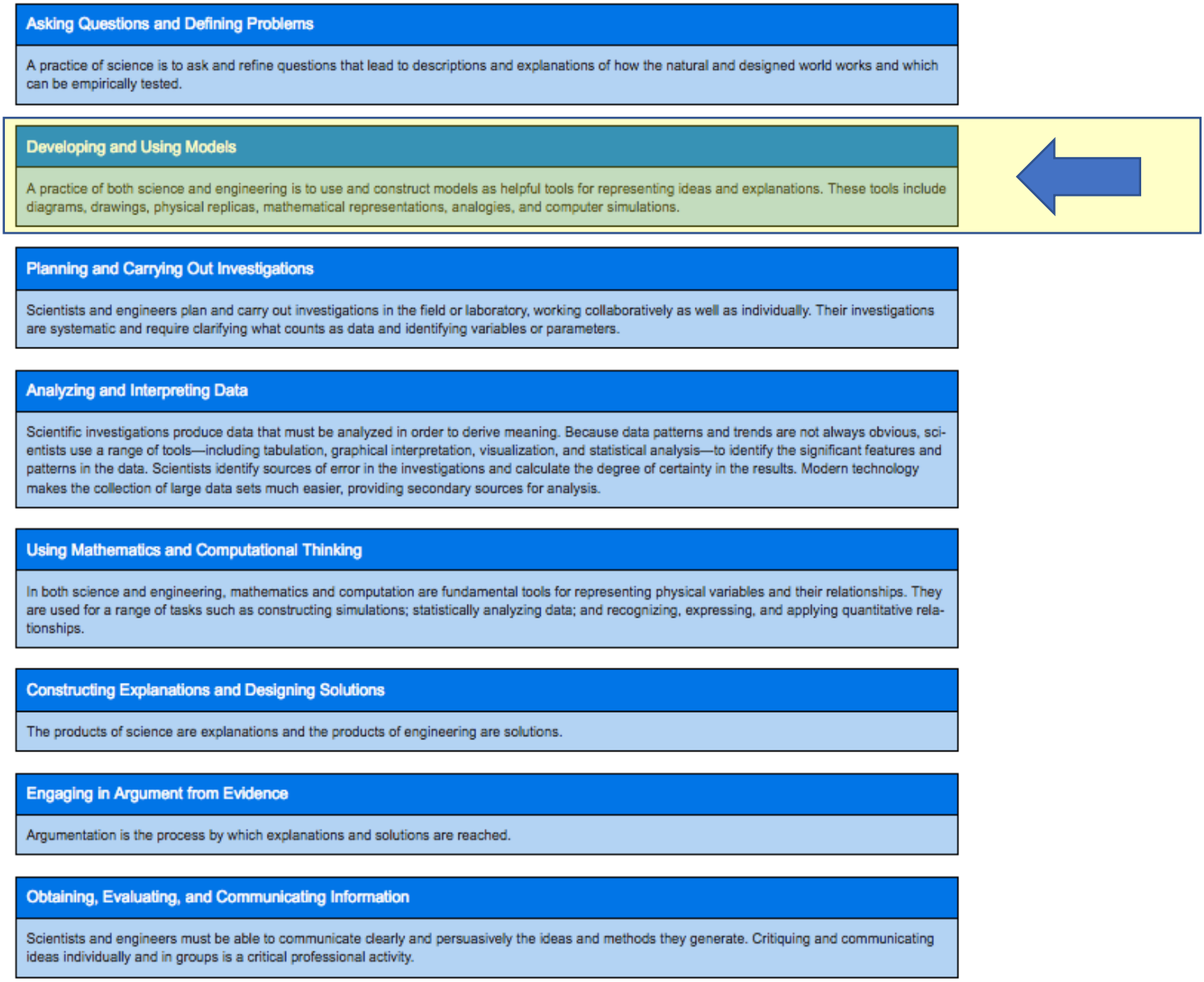
From the start, this curriculum initiative was a team effort. Instructional Coaches/Curriculum Coordinators at the Elementary level partnered with Middle level Science Curriculum Coordinator Ms. Pamela Poitras to further their own learning and to design support structures for classroom teachers. Collaboration across levels was critical, because embracing the new standards meant mastering new content. Importantly, curriculum leaders at both levels were committed to supporting teachers as they built their understanding. For that reason, the team purposefully moved slowly and in step with pilot teachers. The goal was to implement gradually, with fidelity. Just as importantly, teams collaborated to ensure a smooth transition for students. In many ways, the work in Science mirrored the approach to adopting new Mathematics curriculum.

Different Content, Similar Approach

The Mathematics and Science standards emphasize rigor, coherence and connection to career and college readiness. Further, both documents stress the importance of attending to Science practices as well as learning outcomes for students.

Emphasis in STE Standards	Implication for Curriculum and Instruction
Relevance: Organized around core explanatory ideas that explain the world around us	The goal of teaching focuses on students analyzing and explaining phenomena and experience
Rigor: Central role for science and engineering practices *with* concepts	Inquiry- and design-based learning involves regular engagement with practices to build, use, and apply knowledge
Coherence: Ideas and practices build over time and among disciplines	Teaching involves building a coherent storyline over time and among disciplines

The goal of this instructional spotlight is to familiarize you with the Science practices and how they feature in the implementation of the new curriculum. The student part of the presentation will highlight one practice in particular, namely developing and using models.



Next Steps

By 2019-2020, all teachers at the Elementary and Middle level will fully implement the new Science curriculum. As we anticipate next steps, it's important to acknowledge the hard work of the pilot teachers and our curriculum leaders. In developing model lessons and units, these pioneers successfully translated the initial vision of the Science Steering Committee into engaging, rigorous and authentic learning experiences for our students.