

Building School Administrator Capacity in Science Teaching and Learning

Professional learning for school and district leaders is key to any successful implementation effort. These formal leaders often hold decision-making abilities for purchasing, policymaking, and programmatic design. Investments in effective and early learning for these leaders will ensure that both teachers and students receive the resources and support needed to engage in high-quality science teaching and learning.

STORY FROM THE FIELD

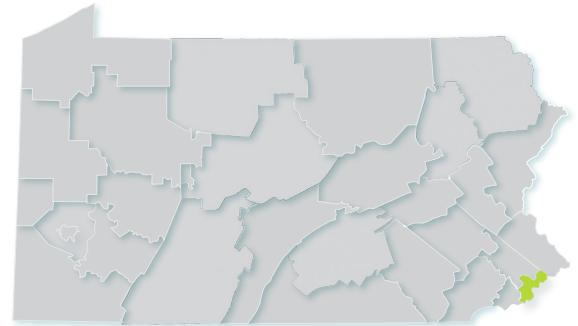
The School District of Philadelphia's science team, which serves over 250 schools and 120,000 science students, came to the Fall 2022 PennSEL Network meeting with a question: After years of delivering high-quality professional development to teachers on research-based science instructional practices, why were these practices being implemented in some classrooms, but not others?

A critical conversation at the meeting led the team to a potential missing piece of the puzzle: While they had focused intently on developing teachers, they had not yet developed all the school leaders who supported them. They realized that if principals better understood what a research-based, student-centered science classroom should look, sound, and feel like, they would be better able to support teachers in bringing it to life.

With help from their PennSEL colleagues and facilitators, the Philadelphia team created an engaging professional learning experience to help school leaders experience the excitement of student-centered sense-making, and then prepare to support it in their own schools. This dynamic session brought over 100 school leaders—principals, APs, school-based teacher leaders, and science leads—through a research-based lesson based on a real-life disaster that occurred on Mount Everest.

By analyzing authentic data, creating and revising their own models, and sharing their thinking with their peers, the school leaders developed a new understanding of how the Earth's movements can cause big changes for landforms and people. They **also** developed a new understanding of how a science classroom based on student ideas can be both exciting and effective.

As a direct result of the training, School and Learning Network leaders in Philadelphia began to increase attention on science in their Professional Learning Communities and walkthroughs; now that they knew what to look for in excellent science instruction, they were ready to go find it! Assistant Superintendent Ariel Lajara of Learning Network 10 was one such Network leader. As Lajara said, "Our district delivered transformational professional learning to my team. We are now scheduled for three Network-wide science walkthroughs in the next few months." The District's science team is excited to support him, and many others like him, thanks to their transformative work with the PennSEL Network.



Map highlighting School District of Philadelphia



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