



## K-8 Science Leadership Network

The new vision of science teaching and learning – based on decades of research and called for in the National Research Council’s *A Framework for K-12 Science Education* and NGSS – requires a foundational change from the standard teaching practices in science classrooms at all grade levels.

The change called for is, in a nutshell, a change from reciting definitions and facts to engaging in practices such as modeling, argument and explanation -helping students shift from “learning about” phenomena to “figuring it out” or sensemaking. The goal is to support students’ science work in an ongoing, well-guided, purposeful knowledge building, progression leading to coherent science ideas.

To accomplish the new vision of science will require a shift in Professional Learning for teachers – a shift from “content delivery” (“here are some tips and materials for Monday morning”) to what we think of as “knowledge building professional learning.” (NGSX 2016)

The K-8 Science Leadership Network provides teachers that use the Cereal City Science Units/Kits to become NGSX (Next Generation Science Exemplar) trained followed by the opportunity for ongoing collaboration within and across districts and schools with a focus on how to improve instruction to support students’ learning as described in the Framework and the NGSS.

Districts are invited to designate a team of K-8 teachers to help lead implementation of the Next Generation Science Standards. Ideally, the district team would consist of at least one teacher from each elementary school building to serve as lead teacher to assist in implementation of the Science and Engineering Practices as well as one 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade science teacher to serve as Disciplinary Core Idea (DCI’s) lead teachers for their district. The K-8 Science Leadership Network will meet by DCI Learning Progressions as followed in the Cereal City Science curriculum. Using the Learning Progressions for Physical Science as an example:

K, 3<sup>rd</sup>, and 6<sup>th</sup> grade teachers meet to focus on the Physical Science learning progressions for Motion and Stability: Forces and Interactions.

2<sup>nd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> grade teachers meet to focus on the Physical Science learning progressions for Matter and its Interactions and Chemical Reactions.

1<sup>st</sup>, 4<sup>th</sup>, and 8<sup>th</sup> grade teachers meet to focus on the Physical Science learning progressions for Energy and Waves.

Similarly, meetings would be held for the Earth Science Learning Progressions and the Life Science Learning Progressions. Each member of the Leadership team would have the opportunity to meet three times per year for a physical, earth, and life science learning progression workshop.

You can register for the NGSX training and Leadership Networking sessions on the Cereal City Science website at [www.cerealcityscience.org/services](http://www.cerealcityscience.org/services).