2018 Learning Pathway Details

Building STEM Infrastructure Across your State, District, or Region

The Smithsonian Science Education Center and Friends

This pathway is intended for educational leaders (state, district, school, or classroom-level leaders) who are facing a shift in science standards. Participants will focus on clarifying their vision in STEM for their school, district, region, or state to support the learning of all students in a student-centered, practice-based manner. This pathway will provide participants with an initial introduction to the Smithsonian Science Education Center's LASER model of systemic reform, and support the development of action items as a first step in realizing their vision. Participants will learn from professionals from across the country who are engaging in similar work in their own communities.

Block 1

Setting a vision. For decades the Smithsonian Science Education Center's Leadership and Assistance for Science Education Reform (LASER) model has provided districts and schools with a framework to achieve systemic change in pursuit of their educational vision. As many states and districts move to adopt new standards, LASER can help contextualize that shift within the bigger picture of STEM education. To better understand the similarities and differences between these new standards we will experience a three-dimensional science lesson and begin to update our visions for STEM education based on this new context.

Block 2

Where have we been? Participants will learn about the LASER model from individuals who have implemented the model. Washington State LASER is almost two decades old. It has reached most school districts in Washington and secured state funding. Its leaders have met changes in the state context with innovation. Find out what defines a mature systemic project. NC SMT LASER has been serving districts across the state for more than 10 years, refining the model to increase success. Learning from the successes and challenges of the past, participants will begin to craft an action plan based on their vision.

Block 3

Professional learning: a case study of one pillar. While LASER is comprised of 5 equal pillars to build a sustainable infrastructure that can be used to achieve three dimensional teaching and learning in the classroom, focusing on one pillar will allow participants to delve into the more immediate needs of implementing new standards. ASSET, an organization that was built on the LASER model in PA, will share with the group innovative new ways to address new standards with professional learning. Participants will apply their learning to continue to flesh out their action plan.

Block 4

Emerging leaders. Individuals from Colorado share challenges and successes seen in their relatively new (entering into year 5) implementation of the LASER model along with some ideas for how they will move into the next phase of implementation given the impending adoption of new Colorado Science Standards. The participants in the whole group will continue to refine their action plan.

Block 5

Sharing plans. Participants will engage in a think tank to learn from other individuals in the room to get feedback on their individual plans. Final copies of participants plans will be shared amongst the entire group to maximize learning in the room.