Building STEM Superheroes in OST

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Abstract

Want to create equitable, inclusive science learning communities? Join us for an interactive session about equity strategies that engage and inspire all K-2 learners. Explore the strategies in action as you do hands-on-activities from a new program Hero Elementary.

Session Details

Join us for a hands-on session where participants will explore an equity model that engages and inspires English learners, children from low-income families, children from historically marginalized communities and children with differing abilities. Participants will engage with the equity model through hands-on activities and superhero themed digital games. We will also discuss key components from the *Hero Elementary* Outreach Program, which helps educators create collaborative superhero themed learning spaces where K-2 children do science and make meaning.

Session Subject Matter

The presentation will be framed around the goal of achieving equity in science education and school readiness for children grades K-2 across the nation, which is the goal of Hero Elementary. Our educational approach is based on research on the most effective teaching strategies to reach all learners in science. Specifically, it is pulled from research done by the Next Generation Science Standards' Diversity and Equity Team, that designated strategies to engage diverse demographics in science learning.

I will focus on strategies that engage English language learners, children from low-income families, children from historically marginalized communities, and children with differing abilities. These include connecting science to children's sense of place, empowering children to be doers of science, engaging children's curiosity through real world experiences, providing flexible learning experiences with multiple representations, facilitating discussion and reflection about science experiences and supporting science learning by connecting to home and community partnerships. The two hands-on activities we do will be framed around these strategies.