The Phenomenal 3-D Science in the Schoolyard Teacher Quality program proposes the renewal of a successful 2016-17 program that increased the capacity of 3rd, 4th and 5th grade teachers to engage students in solving real-world problems by using the schoolyard as a learning lab. It will utilize a phenomenon-based approach, focusing on principles of 3-Dimensional Science, to provide effective pedagogical strategies for teaching and assessing the new Georgia Standards of Excellence in Science, and strategically improve teacher content knowledge in life and earth science. The goals of the project complement the SAGES Curriculum and will: increase the capacity of 3rd – 5th grade teachers to use authentic science and engineering practices to teach the standards; strategically deepen content knowledge; increase teacher ability to arouse student curiosity about science, hone critical thinking skills, improve student content knowledge, and assess competency; and increase the number of elementary school teachers who can integrate science and math using engineering and technology.

The proposed grant-funded activities will begin in March 2017 and extend through April 2018. Activities will occur in two distinct phases. Phase One will include a 5-day summer institute followed by Phase Two which consists of 2-Saturday follow up workshops, webinars, and mentoring during the academic year. These professional learning activities will bring together teachers from high-need LEA: Fulton County Schools, DeKalb County Schools, and Atlanta Public Schools with Kennesaw State University’s Bagwell College of Education, College of Science and Mathematics, and the Captain Planet Foundation.