

Knowles Science Teaching Foundation Launches Project ASCENT

Teacher Network to Explore Why Too Few Students Successfully Complete Advanced STEM Courses

Moorestown, N.J., July 7, 2015 – The Knowles Science Teaching Foundation today marked the launch of Project ASCENT (Achieving STEM Course Effectiveness Through Networked Teachers) with a three-day meeting for participants in Philadelphia, Pa. Through Project ASCENT, KSTF intends to bring teachers' considerable professional knowledge and skills to bear on a problem that has broad and deep consequences for the nation—too few students are successfully completing advanced science, technology, engineering and mathematics courses at the high school level. The Project is launching with guidance and support from the [Carnegie Foundation for the Advancement of Teaching](#) and the [National Science Foundation](#), and will form a Networked Improvement Community, drawing on the principles and methods of improvement science that have been used successfully in the healthcare industry and more recently under Carnegie's leadership in several contexts in education. From July 7-10, 2015, five teacher-led teams will explore the problem, become familiar with improvement science and begin planning how they will work together as a network over the next year.

"KSTF believes that teachers are uniquely positioned to improve education both in and beyond their classrooms," stated [Nicole Gillespie](#), Executive Director, KSTF. "As a teacher-driven organization, we are excited to spearhead an initiative that leverages the expertise of practitioners to find solutions to a critical issue in STEM education. We look forward to seeing what is possible when a networked group of teachers are given the support and resources to work together to solve pressing problems in education."

Self-organized teams of teachers—and others connected to secondary mathematics and science education—from five schools were selected to participate in Project ASCENT: [High Tech High](#) (San Diego County, Calif.); [Millbrook High School](#) (Raleigh, N.C.); [Robert E. Lee High School](#) (Springfield, Va.); [Rolling Meadows High School](#) (Rolling Meadows, Ill.); and [Westfield High School](#) (Chantilly, Va.).

“I find Project ASCENT extremely exciting,” said Dana King, Principal, Millbrook High School. “Too many times teachers are on their own to struggle through the complexities of their work and the Knowles Science Teaching Foundation is committed to breaking this isolation. The collaboration of these teachers can help to build their professional support systems as well as to challenge their practice.”

Each team has identified how the issue of too few students successfully completing advanced STEM courses plays out in their local context. Moving forward, the teams will engage in cycles of inquiry to learn about the problem, develop interventions, collect data on the implementation of interventions, analyze collected data and formulate next steps.

“Project ASCENT is really important to education because it actively allows teachers an outlet to exercise inquiry practices regarding their classrooms. Also, it’s a great way to help professionalize the teaching profession,” said Heather Hotchkiss, Physics Teacher and Science Department Chair, Robert E. Lee High School. “The idea of networked teachers doing structured research into our own practice to build the professional knowledge base of the field is very exciting to me,” she added.

Rory McGlinnen, Biology Teacher, Westfield High School, stated, “I am excited to be participating in Project ASCENT. I am looking forward to working with and learning from the other educators both from inside my building and out. I feel fortunate to be able to work with this team and project and I can’t wait to get started!”

“Project ASCENT and improvement science feel important to me because they empower the people on the ‘shop floor’—the teachers and students—as experts on making schools better. Tapping this resource will help us make systemic change that actually works in the classroom,” commented Stephen Traphagen, AP Biology Teacher/Divisional Technology Coach, Rolling Meadows High School.