



Teens Teaching, Leading, Succeeding



### Peer Enabled Restructured Classrooms build STEM learning communities.

The *Peer-Enabled Restructured Classroom (PERC)* is an innovative intervention in STEM in New York City secondary schools. *PERC* works with non-selective Title 1 schools with high percentages of minority students. *PERC* leverages the power of peer-to-peer learning by placing 10<sup>th</sup> grade students in the role of learning leaders who provide daily instructional support in 9<sup>th</sup> grade STEM classrooms while transforming their own relationship to learning. The 10<sup>th</sup> graders, called Teaching Assistant Scholars (TAS), have backgrounds and prior performance levels similar to the 9<sup>th</sup> grade students they lead. *PERC*'s goal is to increase the numbers of college-ready students and transform school academic culture in historically low-performing schools.

*PERC* has shown strong positive impacts on Regents examination passing rates in 9<sup>th</sup> grade biology, and passing rates in 9<sup>th</sup> grade mathematics are improving over historical rates within schools. Perhaps even more importantly, TAS show strong academic growth by meeting CUNY benchmarks for college readiness. After the peer leadership experience, 57% of TAS meet college-ready benchmarks on Regents exams.

### *PERC* is teaching and researching Computer Science curriculum in schools.



To bring Computer Science to our partner schools, *PERC* first worked with Exploring Computer Science (ECS) ([www.exploringcs.org](http://www.exploringcs.org)), whose inquiry-based computer science curriculum and emphasis on broadening participation fit our mission. Our ECS teachers receive high-fidelity professional development, including a week-long summer ECS workshop, quarterly ECS PD, *PERC* PD, and in-school coaching.

CS and Education faculty researchers, in collaboration with SRI, International, conduct correlational and cognitive process research to contribute to the validation of the ECS unit and final assessments, and to investigate questions about the relationship between computational thinking and other academic achievement.

### Next Steps: CS learning in *PERC* STEM classrooms.

*PERC* provides a framework to support CS learning by building a structure for peer collaboration in STEM classrooms. We are exploring ways to bring CS principles into our STEM courses, and to develop peer leadership opportunities for CS students in our schools.

Computer Science in PERC	
Number of schools offering ECS	4
Teachers trained	5
Students served	210
Female	40%*
Black or Hispanic	90%*

\*2014-2015 data