

# ***Supplemental Instruction at LaGuardia Community College: A Model for Developmental Mathematics Courses***

**Reem Jaafar, Andi Toce, Joyce Ship Zaritsky, and Nathan Dickmeyer, LaGuardia Community College, CUNY**

## ***Abstract***

Supplemental instruction (SI) is an academic support program designed for college level courses. In the SI Model, a leader/tutor—who is a peer—is assigned to a course and is expected to help students succeed in that class. In 1993, LaGuardia Community College launched its version of SI, the Academic Peer Instruction Program (API), with a pilot study employing three tutors for the same number of courses. Since its inception, API has targeted over 800 credit courses. For the first time in the spring semester of 2011, API targeted Elementary Algebra (MAT096), the second of a sequence of two developmental mathematics courses. This effort has continued every spring until 2014. During the academic year 2014-2015, LaGuardia’s API program received additional funds to target additional sections of MAT096. The funds culminated in targeting this course during the entire academic year, including the short sessions (LaGuardia operates year-round with two 12-week “long” semesters and two “short” 6-week winter and summer semesters). In this paper, we describe the API program, the results from the first four spring semesters and how the program has benefited students during the 2014-2015 academic year.



**Reem Jaafar** is an associate professor in the mathematics, engineering, and computer science department at LaGuardia Community College. During her tenure at LaGuardia, she was the recipient of four grants and cofounded the Math Society. She is the codirector for Maximizing Mathematics Achievement (MaxiMA) Project—an MAA Tensor-SUMMA grant from 2013 to 2016. In 2014, she was appointed the cocoordinator of the Academic Peer Instruction program, which significantly expanded supplemental instruction to remedial mathematics. She conducts in-depth pedagogical research about effective classroom practices in mathematics education across all college level courses. She has coauthored 17 papers in peer-reviewed journals and has presented her work in theoretical physics and mathematics pedagogy at over 13 conferences. Her current areas of research are nanomagnetism and mathematics pedagogy.

**Andi Toce** is an assistant professor of computer science at LaGuardia Community College (CUNY), New York. He received a PhD in computer science from the Graduate Center of the City University of New York and an MA in computer science from Queens College (CUNY). He first joined Academic Peer Instruction (API) as a tutor in 2003 and has continuously been part of the program in various capacities. He is currently a codirector of API.



**Joyce Ship Zaritsky** holds an MAT from Harvard University and an EdD from Yeshiva University. She is now a professor emerita at LaGuardia Community College. She pioneered the supplemental instruction (Academic Peer Instruction) program at the college in the spring of 1993 starting with a pilot of three courses, serving as its director until her retirement in 2013. At present, she serves as a senior advisor to the program, concentrating on its tutor training.

**Nathan Dickmeyer** is the director of Institutional Research and Assessment at LaGuardia Community College. He has worked as a consultant to universities and foundations on budgeting systems, computer systems planning, and strategic financial planning. He has been chief financial and administrative officer of six institutions, including City College of CUNY and Teachers College, Columbia University. He has a BS in metallurgy from Michigan State University, an MBA from Harvard, and a PhD in higher education administration and policy analysis from Stanford. His most recent books include *The Strategic Attitude*, *University Budgeting for Beginners*, and *Asking the Right Questions: A Guide for College and University Trustees*.

