Twenty years ago, I was an undergraduate majoring in Biology and Chemistry, struggling with the desire to integrate the details I had learned in my Chemistry courses with the ‘big picture’ philosophy stressed in my Biology curriculum. These early educational experiences fostered my passion for curricula geared towards interdisciplinary learning and in programs designed to increase awareness of alternative learning styles and pedagogies for instruction. My Workshop journey began five years later, shortly after the program’s inception in Organic Chemistry at the University of Rochester under the direction of Jack Kampmeier. To this day, I can’t remember how I became involved with this program, but know it was a life-changing opportunity with incredible people that played a central role in shaping my academic career.

Although my teaching assistantship only required me to work for one year as a Peer Leader, my passion for teaching and in alternative learning styles kept me connected with the program through the next three years as a graduate student, attending annual conferences in Ontario (15th Biennial Conference on Chemical Education), Montana (1st Rocky Mountain Conference on Peer-Led Team Learning, 1999), and Miami (Active Learning in the Sciences, 2000). A decade has passed since I participated in the Miami 2000 conference as a “veteran” Peer Leader, though much that has transpired in the years since then has been shaped by the people attending and the pedagogical philosophies shared at that meeting.

While the next several years were spent actively pursuing my laboratory research as postdoctoral fellow, I longed for the day when I would be able to initiate my own Workshop program. When I accepted my first academic appointment and began teaching Organic Chemistry, I saw the opportunity to begin my own Workshop Chemistry program. With the inception of a Biology degree program, I wanted to ensure the growth of this course and the program, as well as the success of our students in this challenging field of Chemistry. With the previous experience I had in this field and the relationships I had with colleagues instrumental in making this a nationally recognized teaching methodology, I was excited about the potential for success with our students. Our campus learning specialist worked closely with me on the development of this program. In addition, I was successful in acquiring a Faculty Development Grant to fund the first year of the program, which included travel with my Workshop Leaders to the PLTL conference in New York City.

Over the next few years, in addition to implementation of Workshops, I focused on the incorporation of a new pedagogical tool: mastery learning with competency-based grading. Mastery learning is an instructional method built around the concept that students learn best if they fully understand, or master, one concept before moving on to the next. Competency-based grading is an evaluative tool that allows the faculty member to determine the level of mastery students must achieve for a passing grade and lets the student
choose whether or not he/she wants to work beyond this base level of mastery for a higher grade. This marriage of a mastery learning philosophy with the facilitated problem-solving provided through Workshops served as a perfect opportunity for students to engage in their own self-discovery, and thus mastery, of the key concepts of the course. More details on these methodologies and their outcomes will be available in a forthcoming article accepted for publication in the *Journal of College Science Teaching*.

Reflecting on my decade-old comments from the Miami Conference (*Progressions*, Spring 2000), I've realized that many concerns faculty share about Workshop have not diminished. "The more advanced students will be bored by Workshop while those who are struggling with the material will be lost." Contrary to this valid concern, shared by several of my colleagues, my experience was that the more advanced students took the opportunity to reinforce their own learning of the material by helping others work through problems. In addition, those struggling with the material frequently felt more comfortable asking a peer to repeat an explanation. From the student leader perspective, my “veteran” leaders have shared their gratitude for the opportunities that Workshop provided them. This is both from the standpoint of furthering their own mastery of the course material, as well as providing a valuable learning experience that helped them in their future job endeavors.

In spite of these successes personally and professionally as a result of my involvement with Workshop Chemistry, my experiences have also seen some challenges. I experienced many of the difficulties faculty face when incorporating Peer-Led Team Learning in their courses, as this pedagogical methodology was not viewed as a welcome change by some of my colleagues. "We already have a recitation, what is so different about this method?" and "Lecture and recitation worked fine for me, so it should work fine for students." Some felt it was inappropriate to have students leading problem-solving sessions with their peers, and felt the only way to ensure the dissemination of correct information was to do it themselves, through traditional recitation. "The cost in both time and resources can't possibly be justified by the gains." Others were concerned that the time and energy I was putting in to incorporating these instructional methods, and the financial cost of Workshop leaders was not worth what was perceived as minimal benefits to the students.

That was two years ago, and I have since moved on to a new position at Mercyhurst College, where I direct their Biochemistry program. As General Chemistry now falls under my purview, I am excitedly awaiting the outcome of our first set of Peer Leader interviews as we look to incorporate Workshop Chemistry in the General Chemistry curriculum during the coming year. Webster defines scholarship as “the character, qualities, activity, or attainments of a scholar.” Tenure-line faculty define scholarship through aspects of teaching, research, and service. By either definition, Workshop has played a central role in my own scholarly achievements, and for that I am truly grateful.

Amy D. Parente  
Department of Chemistry  
Mercyhurst College  
Erie, PA