

## **If You Play, I'll Coach: Approaches to Student-led Teaching**

**Craig B. Fryhle**

Department of Chemistry, Pacific Lutheran University, Tacoma, WA 98447

Incorporation of Learning Group Problems in classroom teaching helps students become players and their teacher become coaches. Students collaborate, take ownership for learning, and ultimately teach concepts to their classroom peers through presentation of solutions to integrative problems. Students gain the powerful experience of learning through teaching; while as instructors we gain a unique window on our students' understanding of chemistry.

Students and faculty are also players and coaches when they engage in undergraduate research. Students collaborate with faculty mentors, and while doing so, gain the powerful experience of learning through discovery. This talk will provide examples and strategies for coaching and playing that involve student-led classroom teaching and undergraduate research.