PEER-LED TEAM LEARNING IMPLEMENTATION

IN THEIR OWN WORDS: STUDENT LEADERS IN PORTLAND, OREGON, COMMENT ON PLTL

AGNES TENNEY AND BECKY HOUCK

Undergraduate facilitation opportunities for science and math majors have expanded recently with the use of PLTL models in introductory science courses. While most analyses of this curricular model have focused on the benefits to the students in the workshops, there are also significant benefits to the peer leaders. According to peer leaders in PLTL programs at the University of Oregon and Eastern Oregon University, these benefits include:

1. Content mastery: You learn what you teach. Student leaders reported that they learned the subject matter more effectively when they were teaching it. They also reflected on their own learning styles and needs, which affected how they approached new topics in their own classes.
2. Teaching skills: Student leaders recognized that they developed specific skills in classroom management and discussion. For those who had already made a choice to become teachers, this was an opportunity to develop skills that they would need in their future career. These students valued their increased comfort in the classroom, and the confirmation of their interest and talent for teaching.
3. Fun: Student leaders reported that teaching was fun. This was a surprise to many.
4. Service: Students found value in the service components to teaching. They felt valued by their students, and felt that their efforts were rewarded when students increased their understanding of class material.
5. Career: Students who had not considered teaching as a career option reevaluated their possible career goals to include teaching.

At the University of Portland, freshman science students participate in two workshops per week, one in Workshop Biology and a second in Workshop Chemistry. Undergraduate science majors serve as "peer instructors" in a PLTL model in both the introductory biology and chemistry courses. Jenny Blake, a peer instructor in the Workshop Chemistry program, describes the value of the experience both in terms of her own knowledge and in terms of professional rewards:

> The most positive aspect of this teaching experience has been explaining chemistry to someone without previous knowledge and to see their improvement throughout the course. Another large benefit has been reinforcing my chemistry background. Teaching or leading the workshop forces you to explain chemistry, which has been helpful for myself. Before my experience as a chemistry workshop leader, I had no interest in being a teacher. This experience has made teaching seem like a rewarding job. This experience has been

> worthwhile in all aspects of the job. Working with the students to help them understand chemistry, as well as working with the principles of chemistry to further my understanding of chemistry has been extremely beneficial. I would be very likely to participate in something like this again.

Leslie Davis, a University of Portland biology major who has worked with Becky Houck and Mike Snow in the Workshop Biology program and with Agnes Tenney in the Workshop Chemistry program, reflects on her experiences:

> There have been many positive aspects to my teaching experience. Among the most beneficial are getting the excellent review (of course topics) for myself and seeing the recognition in a student's eyes when they grasp a concept or help a friend. After participating in PLTL, I have decided to pursue teaching as a career. I would like to teach at the undergraduate level. This has been one of the most rewarding experiences I have had.

Benjamin Sommers, a peer leader of the Chemistry PLTL program at Eastern Oregon University, which is supervised by Anna Cavinato, comments on the success in the sessions:

> The key to the success of the PLTL program lies in the ability of the peer leader to relate to the students as a peer, a friend and helper who understands them. Communication is paramount to the learning process, but is often far removed in a typical classroom setting. In order to relate and communicate as a group, I discuss the issues of chemistry in the context of my experiences, the students' experiences, as well as working on the basic conceptual ideas of what the students are learning in class. Understanding the differences in learning styles and strategies of different students greatly improves the desire to learn, and the success of the process, so I utilize many different approaches to one idea, until it is clear that all students have an understanding of the subject matter. For instance, the behavior of gases can be looked at graphically, or drawn as diagrams of individual molecules, or algebraically determined (i.e., PV=nRT), or visualized on a small scale (i.e., blowing up a balloon), or looked at on a large scale (i.e., the Earth's atmosphere). Then, all the different methods are linked together and shown to represent the same initial concept. For further reinforcement, students discuss these concepts and attempt to explain everyday phenomena using the combined methodology, and utilizing their newfound knowledge of the concepts at hand.

Agnes Tenney
Department of Chemistry and Physics
University of Portland

Becky Houck
Department of Biology
University of Portland

Cite This Article as: Tenney, A., Houck, B. (2012). In Their Own Words: Student Leaders in Portland, Oregon, Comment On PLTL. Peer-Led Team Learning: Implementation. Online at http://www.pltlis.org.
Originally published in *Progressions: The Peer-Led Team Learning Project Newsletter*, Volume 3 Number 1, Fall 2001.