PEER-LED TEAM LEARNING
IMPLEMENTATION IN HIGH SCHOOLS

PLTL AND THE FUTURE OF SCIENCE TEACHER EDUCATION

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The current shortage of math and science teachers (especially physical science teachers) is exacerbated by two important factors: 1) a strong economy offering excellent employment opportunities with higher starting salaries, faster financial growth, and greater status than teaching, and 2) a culture among scientists that encourages students to become scientists far more frequently than to become teachers of science. While PLTL cannot directly change the first of these factors it can directly and indirectly address the second factor. By supporting PLTL faculty with initial funding, professional development, inquiry-based curriculum for student-led workshops, guides for workshop development, and continuing education of workshop leaders, the PLTL Model educates college science faculty about the potential of students as teachers/learning-facilitators. The student workshop leaders themselves awaken faculty to the understanding that their talents ought to be directed toward the profession of teaching. Furthermore, the presence and support of learning specialists in collaboration with PLTL science faculty and workshop leaders complete the connection to teacher education.

While student workshop leaders recognize that teaching may have less status and financial reward than other science careers, their experience as a workshop leader often leads them to choosing a teaching career for other personal gratification. To illustrate from one among many similar stories: during the first year of PLTL at the University of Portland, six out of eighteen peer leaders in chemistry and biology chose to change their graduate education plans from medicine to teaching. They reported enjoying teaching far more than they thought they would. Another important factor in this instance is that their cooperating PLTL faculty were also involved in the Oregon Collaborative for Excellence in the Preparation of Teachers (OCEPT). These faculty were alerted to the need for future teachers, and they were committed to learning more about teaching and science education reform. No doubt, this combination of instructionally-motivated, supportive faculty and rewarding workshop leading experiences contributed to the students’ career choices.

PLTL has been so successful in this regard that it is currently being considered one of the chief teacher recruitment strategies at several PLTL institutions. At Portland State University, we are expanding the program and seeking support for this expansion with the explicit goal of providing a pipeline for science students into our Graduate Teacher Education Program. We are also using PLTL to identify and support prospective teachers from traditionally underrepresented groups in science education.