

1046-C1-1136 **June I. Decker*** (jdecker@trcc.comnet.edu), Three Rivers Community College, New London Turnpike, Norwich, CT 06360. *A math teacher sees the light: Photonics labs in an algebra class.* Preliminary report.

The presenter will discuss her experience teaching intermediate algebra infused with examples from engineering technology. In 2007, Three Rivers Community College formed a Technology Learning Community (TLC) student cohort funded by an ATE/NSF grant. Among the program's features is interdisciplinary teaching and learning among the first semester English, Technology and Mathematics courses. In preparation for teaching the course, the presenter attended a weeklong Problem Based Learning Workshop (PBL), also funded by an ATE/NSF grant whose purpose is to develop and disseminate industry-driven problem-based learning challenges for secondary and postsecondary institutions. The presenter collaborated with a photonics professor to do two labs with the students. The first lab focuses on discovering the inverse square law and understanding irradiance by fitting curves to data that is gathered. An exponential function is illustrated by the second lesson that collects data on the amount of light passing through different numbers of filters. The presenter will discuss the benefits of working with a scientist, the importance of support staff in working with cohort groups, and the success rates of the cohort group in subsequent courses. (Received September 14, 2008)