



Title: Amazing Light, Fiber and Telecommunications Demonstrations

Date/Time: Wednesday, July 30, 1:45 PM – 2:30 PM

Location: Renaissance Austin Hotel

Description: Come explore how you can introduce key optical concepts into your telecommunications curriculum in a fun and easy format. Learn how fiber optics and telecommunication basic concepts can be fun when using visual, interactive and hands-on demonstrations in the classroom. Presentations include: T.I.R , Snell's law, see how "light travels down a fiber," introduction telecommunication basics using secret codes, and hear how infrared energy travels. This session will have demonstrations and hands-on activities that are designed to capture and ignite the curiosity of the learner into the fascinating world of light, fiber and telecommunications. These demonstrations are intended to grab the learner's attention and introduce the learner to primary and basic concepts of light, fiber optics and telecommunications. They can be modified and used at all levels of learning, from K-12 to college level classes. Demonstrations will be used in the presentation, and there will be time set aside in the last 15 minutes to "try out" the demonstrations.

Presenter:

Barbara Washburn holds a BS in Electrical Engineering from Western New England College, a MS in Electrical Engineering with a concentration in laser electro-optics from Tufts University and a MS in Adult Learning from the University of Connecticut. She is Division Director of Engineering Technologies for Naugatuck Valley Community College in Waterbury , Connecticut. She was Department Co-Chair for the Electronics Systems Group at Springfield Technical Community College and taught courses in the laser electro-optics technology and telecommunications technology programs. She has been a major contributor to distance learning course offerings. She works closely with the Gender Equity Department of Massachusetts to host workshops and explorations in photonics technology to minorities and girls in the middle and high schools.

Prior to coming to STCC, Professor Washburn was an Assistant Professor of Engineering and Program Coordinator for the Laser Fiber Optics Technology Program at Massachusetts Bay Community College, where she was responsible for developing the curriculum and laboratories of the Laser Fiber Optics Technology program. Prior to joining the faculty at Mass Bay, she worked in the laser optics industry for eight years, as lead Optical design engineer for Raytheon. She was a co-principal investigator for the NSF-funded Photon and Photon2 projects with NEBHE, and a co-principal investigator in the NSF-funded ComTech project at the Harvard-Smithsonian Center for Astrophysics, which developed photonics instructional materials at the middle and high school level.