

AbstractID: 12675 Title: Collaborative Teaching; A Model for Enriching the Medical Physics Learning Environment

The classroom remains a valuable element in medical physics education because it brings the learners (students, residents, etc.) into direct contact with knowledgeable and experienced medical physicists who can motivate and guide the learning process. A longstanding limitation of the traditional classroom is its separation and isolation from the actual physical realities (medical imaging procedures, radiation therapy applications, etc.) that are being studied.

Most learning facilitators (medical physics teachers) recognize the effectiveness and value of high-quality visuals for the classroom as a "window" to the world of physical reality. It is generally not practical or efficient for each teacher to produce all of the visuals needed for his or her classroom activities. This is a limitation because of time, resources, and probably the experience and skills to produce effective visuals.

The objective of the Collaborative Teaching Model and Project reported here is to enrich medical physics classrooms and collaborative learning discussions by providing high-quality and effective visuals as an open and free resource that eliminates the limitation of efficiency for individual on-site teachers and institutions.

The collaborative model is composed of the synergistic combination of many on-site class/conference room teacher/facilitators and a centralized supporting facilitator. Each makes specific and unique contributions to the learning environment.

The *on-site classroom teacher/facilitators* contribute to the learning environment and process in many ways. They provide knowledge and experience that is specific to the local applied physics and clinical environment, have an interactive relationship with the learners, motivate and guide the learning process, and play a major role in helping the learners understand and apply the science and technology to clinical procedures.

The *centralized supporting facilitator* translates extensive career experience into high-quality visuals and related materials that are available online as an open resource (<http://www.sprawls.org/resources>) to all learning facilitators and learners around the world.