

## **INTRODUCTION**

Teleteaching is the process of using contemporary computer and communications technology to link students to a teacher who is not in the same physical location. It makes it possible for educational programs to expand the scope and quality of teaching by utilizing highly qualified and experienced faculty who might be located anywhere else in the world. It is an economical and efficient method for institutions to share faculty for the purpose of expanding the scope of the educational experiences provided to their students.

## **GOALS**

The goals for the design and implementation of an effective and efficient tele-teaching program include:

- Expanding the faculty capabilities of an educational program beyond the constraints imposed by economics and geographical location
- Retaining the advantages of traditional classroom teaching by providing for effective student-teacher interactions, communications, and discussion
- Improving the quality of teaching provided to students
- Reducing problems of scheduling student-teacher interactions
- Emphasizing the development and utilization of high-quality educational materials
- Increasing the capability of individual faculty to teach more students regardless of geographic location

## **SYSTEM DESIGN AND FUNCTION**

A teleteaching system is designed to provide the following specific functions:

- Multimedia presentation and lecture delivery
- Transmission of selected educational materials
- Teacher-to-student transmission of objectives and assignments
- Two-way interaction and discussion
- Two-way data transfer
- Access to web based resources
- Student-to-teacher transmission of completed problem solutions, papers, and tests

## **CONCLUSIONS**

Teleteaching can be used to expand medical physics educational programs to include faculty from anywhere in the world.

As an example, a very successful teleteaching program has been developed and is used by one of the authors (PS), who is located at Emory University in Atlanta, USA, to teach both graduate medical physics students and radiology residents at the University of Malaya, in Kuala Lumpur, Malaysia.

## **LEARNING OBJECTIVES**

1. Identify appropriate applications for teleteaching
2. Evaluate the advantages and limitations of teleteaching
3. Select appropriate equipment and software for teleteaching
4. Design an effective teleteaching program
5. Use teleteaching to improve the scope and quality of medical physics education

