Computer Based Teaching and Learning of Physics at undergraduate Level by using Multimedia

Muhammad Hanif, National University of Sciences & Technology, Islamabad, Pakistan
(drhanif-mcs@nust.edu.pk)
Fatheya Alahmadi, Abu Dhabi Education Council, UAE

ABSTRACT Recent teaching approaches of emphasize the role of technology-enhanced environments in science learning: such environments allow learners to explore scientific phenomena interactively. Multimedia and computer-based tools enable learners to perform complex, inquiry-based learning activities. Computer based teaching and learning of physics became quite common component of the process of education. It includes tutorials assessment, experiments, data processing and presentation, modeling and simulation. We have developed computer based lessons/lectures for the undergraduate students of our university. These lessons/lectures include mainly topics from classical mechanics and electricity and magnetism. A proper CD has been prepared and is being practiced while teaching physics. Follow-up results clearly indicate increase in learning of physics by the undergraduate students.