

# **What is Physics Education?: A personal perspective**

Gyoungho Lee

Associate Professor, Department of Physics Education, Seoul National University, Seoul, South Korea

Visiting Professor, Department of Physics and Astronomy, Calvin College, MI, USA.

Physics education is a young academic field with a long historical tradition in many countries. However, it has only recently received full recognition of its specificity and relevance for the physics community. There may be several reasons for this. On the one hand, this may be due to the fact that teaching, namely education, is part of the job of university researchers and it has often been implicitly assumed (not always correctly) that the competences required for good research activity also guarantee good teaching practice. On the other hand, and perhaps more importantly, is the fact that the problems afforded in doing research in education are complex problems that require a knowledge base not restricted to disciplinary physics knowledge, but enlarged to include cognitive science, educational psychology, history and philosophy of science/education, etc. In my talk, I will share my ideas about ‘What is Physics Education?’ based on my personal experiences as a physics education researcher discussing key issues such as, the need for physics education, the complexity of physics education research/practices, and a new approach to improving physics education.