

A comprehensive education not only requires instruction by qualified teachers, but is enhanced if students can gain hands on experience. Solar energy technologies provide simple experiments where students can learn about science and technology while at the time giving concrete examples that are a growing part of every day life experience. In this paper two approaches to hands on experiments are discussed. The first is a series of lab equipment and experiments that were developed at the UNESCO - MSUAE Chair "Renewable Energy and Electrification of Agriculture" at the All Russian Research Institute for Electrification of Agriculture (VIESH) to help teach the principles of photovoltaics, particularly to students of the Moscow Power and Engineering Institute (Technical University). The second is the use of actual photovoltaic systems installed at schools and monitored to demonstrate the system performance. These two experimental methods are examined and compared and contrasted.