

This paper concerns educational projects implemented at a number of Moscow secondary schools (high schools) and, secondarily, how an offshoot from this project is being tried in Oregon.

The novel feature of this program is the involvement of schoolchildren with activities utilizing satellite based realtime monitoring of the Earth's surface and making use of this data to estimate incident solar radiation. The processed data can then be used to evaluate the performance of solar energy systems.

Within the project, schoolchildren acquire basic knowledge related to renewable energy using experimental solar photovoltaic modules installed on the school's roof. Pupils monitor, in real-time, the electricity generated by the solar module and compare these data with information derived from satellites.

In Oregon, laboratory kits have been developed to explore the behavior of solar cells. These lab kits augment the work associated with measuring the solar resource and modeling the performance of solar electric systems.