In this research, the effects of a short-time practical basic scientific training on high school students, participating in a TUBITAK (The Scientific and Technological Research Council of Turkey) supported project was studied. Within the project, the students were given not only experimental but also theoretical training covering current issues in the areas of basic science such as physics, chemistry, biology, and mathematics in the weekends. To measure students’ science process skills levels before and after the scientific activities, a 25-question test was applied. By using the multiple-choice test, the participants’ knowledge and skills of their scientific literacy before and after the trainings were surveyed. Data gained from the test were statistically analyzed by using Paired-Samples "t" test. For this process, MINITAB program was used. As a result of the analysis, the difference between the answers given to the questions testing the scientific process skills before and after the training was found statistically significant (P<0.05). It was observed that the training and activities of the project enhanced the scientific literacy skills of the participants.