Science Camp, a research program aimed at motivating youths to study engineering and make interaction between engineering and lower grade education like junior high school and high school.

Abstract - Science Camp is a research program aimed at motivating young people to study science, mathematics and technology. The program was first carried through in 2002 when near 100 teenagers from junior high school and their teachers participated in a 14 days long scientific investigation project. The junior high school pupils were guided and taught by engineering students from the Østfold University College in Norway. Teachers from junior high school and professors from the University worked out this project together. The camp was financed by the National education Office and the Østfold County Council. Science Camp was a great success due to the focus on creating motivation by introducing young people to mysteries, and use scientific equipment to investigate them. The Science Camp doctrine is that mysteries motivate to gain insight and knowledge. For over 100 years, mysterious lights have been seen flying around in a small remote Norwegian valley named Hessdalen. The intensity of their appearance made a peak in the period of 1982-1985. Lights were seen daily in this period, and the Hessdalen light phenomena became a world known tourist attraction. No scientific investigation has been able to explain the behaviour and existence of the flying light balls. Science Camp uses this world known mystery as a motivation factor, and the NASA Inspire program and Astronomy to gain insight into science, mathematics and technology. In the NASA Inspire program, the participants develop and use ultra low frequency receivers, to study electromagnetic radiation from space and ionosphere. The participants in Science Camp were taught to build and use NASA Inspire receivers & antennas to study electromagnetic radiation from the Hessdalen phenomena. In addition they were also taught astronomy and how to use optical spectroscopy to determine the composition of chemical elements in the phenomena. The participants were also using several other sophisticated instruments like RADAR, Geiger counters and radio frequency spectrum analysers. The “fire power” of modern science was given into the hands of teenagers to give them possibility to force the Hessdalen phenomena to give away its secrets. Two research bases and scientific equipment was established in the mountains together with a control centre down in the valley. The research bases could only to be reached by foot after climbing the mountains, and all communication was done by radio transmitters. The participants managed to detect the flying light phenomena several times, and the interest from media was huge. Several TV programs about this project were made. The pupil’s web page from 2002 is still operational, se: www.sciencecamp.no. During the project, this page had over 37000 hits in joust 24 hours, an unbelievable interest! This interest was based on science, technology and mathematics, used in the challenge for unmasking a mystery. Plans is now being undertaken to make Science Camp open for teenagers from other countries in 2004/2005. Science Camp International is based on cooperation between USA (NASA Inspire, Goddard), Italy (Institute for Radio Astronomy, Bologna) and Norway (Østfold University College, Hessdalen).