Teach and Touch the Earth and Sky

Camelia Florina Tendea
Romania (florinatendea@yahoo.com)

My name is Camelia Florina Tendea. I am primary school teacher at "Horea, Closca and Crisan” Secondary School, in Brad, a town in the west side of Transylvania. I am permanently interested to develop my knowledge and teaching skills about space sciences (Earth and Sky) because the new generations of students are very well informed and curious about these topics. In this context the teachers must be prepared to deal with such requests in school.

Introducing of activity:

For a primary school teacher is a real challenge teaching about Earth and Sky, so I consider that a collaboration with science teachers, engineers and other specialists in the sciences is absolutely essential and beneficial in the educational design. In my opinion, the contents about Earth ans Sky-Space in a single word- are very attractive for students and they are a permanent source of discoveries and provide a multidisciplinary vision, so required in the education.

Possible contents to teach in primary school:
about Earth:
-Terra –the third Planet from the Sun; How Earth spins; Land and water; The Earth seen from space, Trip between Earth and Moon, Weather Phenomena; the Poles;

about Sky: Solar System, Asteroids, Comets, Meteorites; Rosetta Mission or rendez-vous with a comet; Sun.Moon. Earth. Eclipse; Light Pollution and protection of the night sky; Life in Space. Astronauts and experiences;
Mission X:- Train Like an Astronaut; About ISS.

For teachers it is important to know from the beginning how they teach, a viable support is the teaching of STEM subjects, which provides access to careers in astronomy, science/technology space.

We could teach about earth and sky using different kinds of experiments, simulations, hands-on activities, competitions, exhibitions, video presentations.

Competences developed in primary school through these contents:
Communication, individual studying, understanding and valorisation of scientific information, relating to the natural environment. In addition, they are supplemented attitudes and behaviors that care for their health, for the health of others and to the natural environment, interest and appreciation of logical argument; curiosity and concern about environmental phenomena, independent thinking, creativity.

I think that is very important, like teacher, to combine the two parts of teaching: theoretical one and practical one. TEACH means setting a bag of theoretical aspects and also who can provide us support? (ideas, resources, scientific competitions etc.) and TOUCH means practical aspects for teachers & students.

Results:
Participating of teachers and students at workshops, round table, scientific debates provide knowledge about Space in context of STEM disciplines, Hands-on experiences;
Find different situations of learning;
Ideas, methods and techniques for design new lessons;
Real scientific data from ESA/ESERO/ROSA sites;
Chance to be part of international projects.

Conclusions: Teach and Touch the Earth and Sky – could be a great chance to benefit from the proposed programs of ESA, through which space can be brought into the classroom and used as a tool for teaching and learning, moreover access to actual scientific data and experiences shared by the scientists, or other specialists offers a new perspective in the study of STEM subjects by students.