



Global Friendship Through Space Education

YEAR 4
ISSUE 1

November 9,
2009

ASTRO

The Partner School Science Program Newsletter

ANNOUNCEMENT

We made a decision with all E-Pal Week participant teachers to ask schools to prepare Astro magazine. This year's first issue was prepared by Kartal Doga College teacher Mr. Huseyin Keskin and his students.

Schools may present information about their schools in addition to space-related articles.

If you are willing to prepare the next issue, please contact us. If we don't have any volunteers to prepare the magazine, GFTSE will choose a school to prepare the next Astro.

EDUCATION MODEL WITH DOGA CONCEPT



Natural and relaxed, Doga does not have any pressure. Everything flows with a positive attitude. The system is versatile with the least amount of fuss. Doga provides fine examples of teaching in a natural environment with excellent teaching staff.



When we started educating a Doga generation, we agreed the best way to provide the finest education for our students was to involve nature. We wanted our students to take full advantage of nature.

There are 8 primary schools now. For details, please see the following link:

<http://www.dogacollege.com/sayfa.php?ID=379#primary>

Student-Oriented Education System (S.O.E.S)

Doga Schools work continuously to give students a better education through the implementation of the educational system, the Doga Concept, which supports existing systems' new applications. At the same time, R & D work is regularly renewed. Within the framework of the system that is being applied in our schools, which is a student-oriented education system (SOES), each student has a one-on-one



wants to develop his or her musical abilities can also choose lessons from this specific academic area.

In this way, students will have their own academic programs and, therefore, more efficient educational development. Next year this system will continue to develop more and will continue to be implemented. Within this program our students will be able to choose 3 lessons they wish from 4 different areas (e.g. preparation for SBS, foreign language, arts and sports, or science and expertise).

coach. We have started to apply this student advisor system in the academic area. In this context, with the help of our student advisors and parents, our students will be directed to areas which are more relevant and needed for their educational improvement. This means that a student who wants to do an intensive preparation for SBS can choose a lesson from this academic area, and a student who



For our successes: <http://www.dogacollege.com/sayfa.php?ID=388>

E-PAL WEEK AT SPACE CAMP TURKEY JULY 5-11, 2009

Of the activities that I've attended throughout the summer, E-pal Week was the most detailed and enjoyable one.



L to R: Mr. Huseyin Kesin, Astronaut Jon Mc.Bride, Mr. Muhammet Ozsoy and Mr. Gurkan Sinan

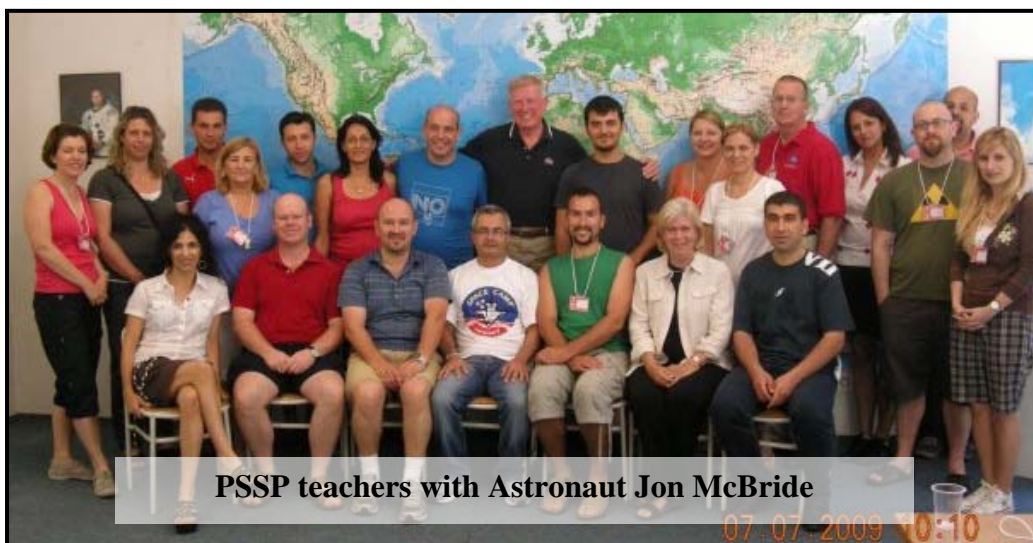
First, I want to thank Mr. Tolga YILDIRIM and his friends who created this project and gave us an opportunity to join this process.

E-pal Week is a

great project in which people from different cultures partner with each other, meet each other, and open pathways to ever-lasting friendships. In addition, training in things such as astronomy, mission activity, and simulators add many positive aspects for us.



I am really happy that I got the chance to join "E-pal Week." As long as the GFTSE program lasts, I will gladly take part in this project.

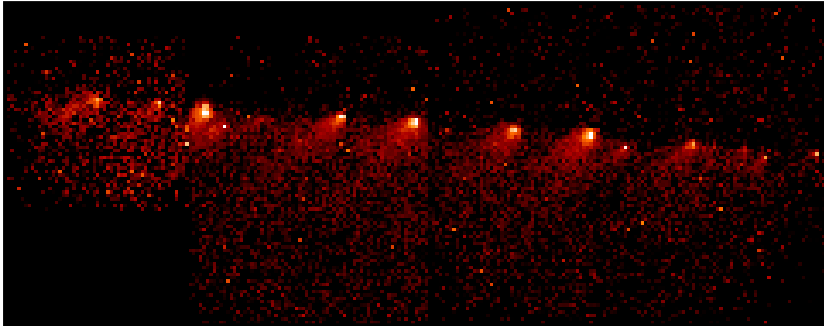


PSSP teachers with Astronaut Jon McBride

I also want to state that "to be a PSSP teacher is a privilege!"

DISAPPEARING COMETS

After the comet passes closest to the Sun, it begins its journey back to the outer solar system - perhaps well beyond the orbit of Pluto. As it does so, it begins



to cool, and the gases stop escaping so that once again the comet appears as nothing more than a "dirty snowball." However, some comets don't have such a lucky escape. Occasionally a comet may pass so close to the Sun that it

crashes into the star, never to be seen again. Such events have been recorded, and the movie presented here (courtesy of NASA) shows a comet disappearing behind the Sun, as observed by the Solar Maximum spacecraft. Instruments on board were designed to block out the disc of the Sun, and the comet which can be seen disappearing into this region, was never seen to re-appear, suggesting that the comet may have been "boiled away" by the Sun.

Comets can also be destroyed by colliding with other solar system inhabitants, such as the planet Jupiter. In July 1994, the comet *Shoemaker-Levy 9* (named after the people who discovered it, and pictured left) did just that. Observatories all over the world, and the orbiting *Hubble Space Telescope* watched the events unfold. Fragments of the broken-up comet were tracked as they entered the gaseous atmosphere of the giant planet, and the marks from the encounter were clearly visible afterwards (NASA).

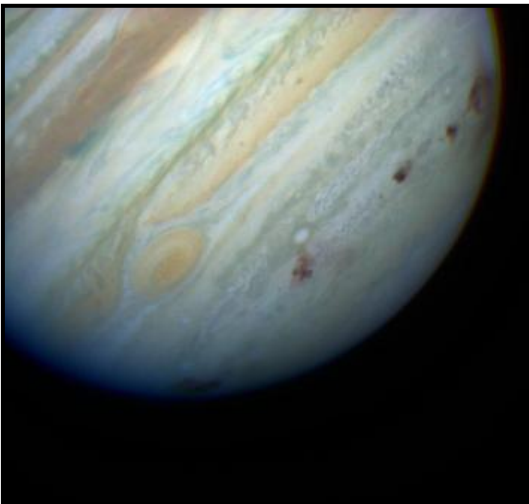
The results of Giotto

Several spacecraft encountered Halley's comet in 1986, but the most significant was the European Space Agency's *Giotto*. Launched on July 2nd 1985, it encountered Halley on March 13th 1986, approaching to within 600km of the comet's nucleus. *Giotto* carried many scientific instruments including cameras and dust detectors.

Giotto found that the nucleus of the comet measured around 16 by 8 by 7.5 km, and that the comet was indeed the "dirty snowball" which Fred Whipple had suggested years previously. The nucleus showed hills and "valleys", although the shape was being altered continuously by the jets of gas coming through the surface and forming the tail and coma. *Giotto*'s view of the nucleus of comet Halley is shown on the left.

Deep Impact

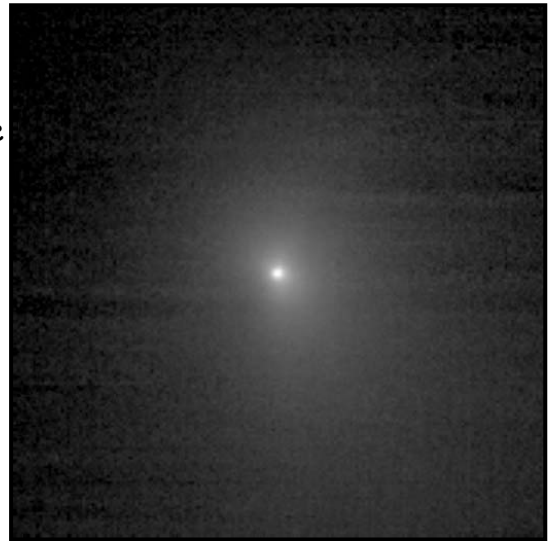
Deep Impact is the name of NASA's latest cometary mission. The probe traveled towards comet Tempel 1, and on July 4th 2005 it dropped a 370 kg mass into the centre of the comet. It then observed the impact from above and sent images back to Earth. The comet appeared to be made of loosely compacted material, that rose in a clouds of the impact should provide information about the composition of Tempel 1 and therefore about the formation of our solar system. Not to



sever all links with the film of the same

name (!) it may also provide us with clues about the implications of such a body colliding with Earth. The probe itself is returning to orbit Earth, and will undertake a further mission if all goes well.

(Image courtesy of NASA).



Every other week when you check your mailbox, you will find a link to reach cool pictures, fun, facts, space news, and more in the **Astro** Newsletter.

Being part of the Partner School Science Program and getting the chance to talk to other kids from all over the world can be really fun!

Do you have something you would like to see in **Astro**? If so, ask your teacher to send an e-mail to tyildirim@gftse.org with the photo, story, or link. You might just see it in the next **Astro**!

Teachers can submit pictures and stories of their class to be included in the partner school highlights section!

ASTRO IS A PUBLICATION OF GLOBAL FRIENDSHIP THROUGH SPACE EDUCATION, PLEASE VISIT US AT

<http://www.gftse.org>

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