First Science Fair in Afghanistan May 29, 2010, Afghans4Tomorrow School, Kabul

Report by Dr. Wahid Omar, A4T Board Member & SF Judge

The first Science Fair (SF) in the history of Afghan schools happened on Saturday, May 29, 2010, at A4T 1 from 9:00 to 12:00 AM. The event, sponsored by Afghans4Tomorrow, was attended by students, teachers, staff members, and guests from the Ministry of Education, scientists, a science teacher from ISK, media representatives, directorate of private schools in Afghanistan, and many parents. The event had two parts:

- The official ceremony started with opening remarks (A4T teacher) in the yard, reading the Quran (A4T teacher), national anthem (A4T chorus group), a speech about the importance of critical thinking (Dr. Wahid Omar), a speech about the importance of scientific inquiry in our daily life by a biologist (Dr. Abdul Hadi Stanikzai), a speech about the importance of inquiry based learning methods (MoE), the importance of science in schools (Director of private schools), appreciation speech (A4T student, Samira), and process of selection and closing remarks (Principal Laila Saidi).

-The Science Fair, which included display boards and students' presentation, occurred inside the science classroom, where a panel of three judges listen carefully to each presentation and asked questions. The judges scored each presentation with specific criteria such as level of efforts, quality of display, completeness of procedures' notebook, background info, soundness of hypothesis, effectiveness and method for collecting data, and conclusion of the experiment. Subjects of the experiments were as follow:

Group No.	Торіс	Assumption	Student Name(s)
1	The cost difference between consuming bread cooked in women's bakeries and regular bakeries run by men	Women's bakeries are cheaper	Razia
2	The difference in the growth of potatoes planted in two areas of Kabul with different climatic and soil conditions: Chardehi and in Charikar	Potatoes in Chardehi will grow better	Susan and Suman
3	To measure monthly water needs in a number of families living in the mountains of Chendawool Hill, in Kabul	No assumption	Nazila and Omaira
4	Milk production of a cow under different feeding conditions like feeding with concentrated food and feeding with simple wheat straw.	The cow will produce more milk when it is fed with concentration food	Jamila
5	Use of Mastar (Medicinal Plant) for treatment of Rheumatism and Diabetes Mellitus in some patients.	The plant will effectively treat Rheumatism	Arezo and Seweeta
6	The effect of different food on egg production of the hen. For example, feeding with a balanced ration vs. feeding with the waste (leftovers) from a family's dining table.	The hen will produce more eggs when it is fed with a balanced ration.	Sania and Samira
7	Growth of the seeds of the Monocotyledon and Dicotyledonous plants under the same soil and climatic conditions	The Dicotyledonous will grow faster	Ferishta
8	The effect of animal manure and Nitrogen Phosphate (Urea) as fertilizer in the growth of rose flowers. (Prepared by: Dr. Zekria Ahmadzai)	Rose bush will grow bigger if Urea is used as a fertilizer	Farzana

Plan for Science Fair Experiment Projects by 7th and 8th graders at A4T 1 School

Parents and guests were invited to attend the presentations as well. An atmosphere of joy, excitement, discovery, and curiosity made the event an incredible gathering between different stakeholders. When the judges finished listening to the presentations, they deliberated about the results in a close room for half an hour and made the difficult decision to select the winners.

The winners were:

1 place: Sania and Samira (group no 6)

2 place: Arezo and Seweeta (group no 5)

3 places: Razia (group no 1)

Jamila (group no 4)

The winners received cups and gifts. Other students each received a two volume Dari dictionary as gifts for their good work. While we conveyed to the audience the hard choices we had to make to announce the winners, we encouraged students to continue discovering our world on their own.

The process took four months to be completed and each student worked very hard to accomplish their task. Parental involvement was significant in helping their children with transportation to research sites, materials needed, and some guidance. Special thanks go to: Mrs. Heike Schmidt from ISK who helped us with explaining the process, Shaima, our science teacher, for following up with students' progress for four months, Dr. Stanikzai for advising, Laila Saidi and her staff for managing the entire event, Dr. Zekria Ahmadzai for supporting the event with his entire team, Elias, Sakhi, and Ali Reza for their logistical support, Santwana Dasgupta for her leadership, Najib Sedeqe for taking great pictures at the event, Sabrina Omar for helping the girls understanding some procedures and making their display board more attractive, and above all students of A4T for making this event a complete success with their hard work.

One day after the event, Laila invited other grades to look at the display boards, and had a follow up meeting with students who participated in the Science Fair. Many new parents came the next day to register their children at A4T 1 because the news of the SF and its value was spread very quickly around the district. We are hoping that the practice of critical thinking will spread to other schools in Afghanistan, as this is the number one impediment for peace.



Students explain their projects (group #6)

First place winners: Sania and Samira (group # 6)

See more photos in our **A4T Photo Library** at <u>www.afghans4tomorrow.org/albums/index.asp</u> (in Album # 23). See also <u>www.afghans4tomorrow.org/default.asp?contentID=62</u> for more info.