Puzzle Universe

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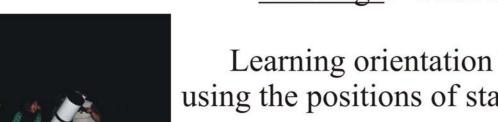E-mail: imc.blaj@mail.albanet.ro
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Blaj is a town from Transylvanian plateau, at the confluence of Târnava Mică river and Târnava Mare river, near to Mureş River, surrounded by forested hills, and two natural reservations. Working with students, will point some particular aspects of this area, as well as some methods of teaching and studing science.

"To understand our bio diversity" is a project addressed to 8th to 11th grade students and its structured in three important stages:

✓ first stage: "**Following a star**"

Learning orientation by the stars, students had to determine the coordinates using the positions of stars in the sky.

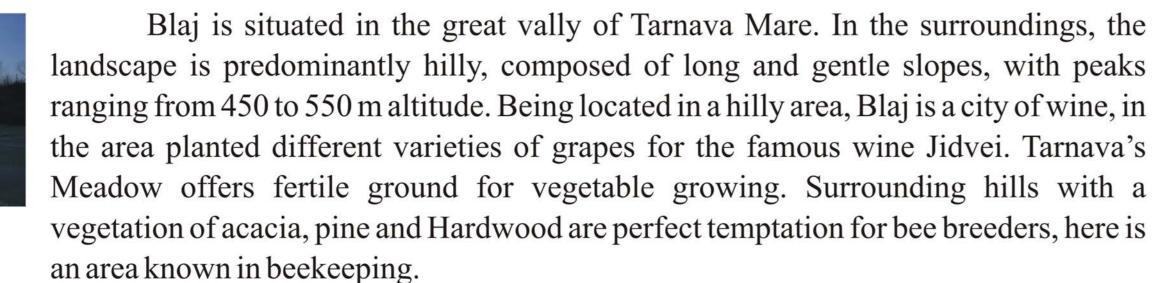Astronomical Club from our school was involved with activities as:
☞ observational nights for community, activities in which students were transformed into the role of teachers to guide the sky.
☞ using measurements over Polar's position they had to determine latitude of the place
☞ using a stick and Sun, also they had to determine latitude of place
☞ development of information materials (leaflets, posters)
☞ astrofotography

✓ second stage: "**Know your home lands**" involve:
☞ recognition relief, fauna, vegetation
☞ landscape photography

Blaj is situated in the great vally of Tarnava Mare. In the surroundings, the landscape is predominantly hilly, composed of long and gentle slopes, with peaks ranging from 450 to 550 m altitude. Being located in a hilly area, Blaj is a city of wine, in the area planted different varieties of grapes for the famous wine Jidvei. Tarnava's Meadow offers fertile ground for vegetable growing. Surrounding hills with a vegetation of acacia, pine and Hardwood are perfect temptation for bee breeders, here is an area known in beekeeping.
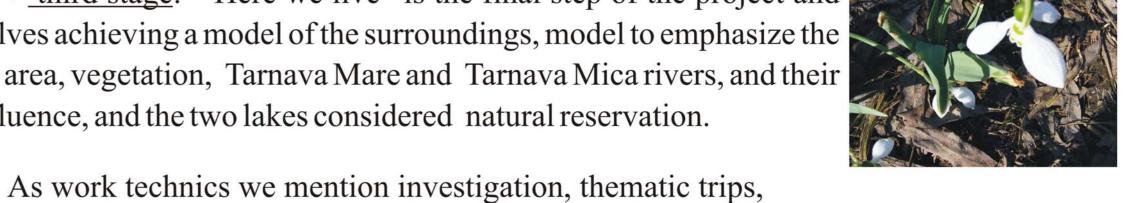
On the northen edge of Blaj, is Lake Chereteu with an area of over 1 ha and a maximum depth of 2.20m. It was formed by a landslide from the neighbouring hills and the water from rain and springs which accumulated behind it.

Panade lake or is located in hidrologic basin of Panade river, an afluent of Tarnava Mica, to altitude of 368 m, behind of a landslide of Chiciu hill, 463m. It has an area of 1.5 ha, maximum depth of 2.80 m. Panade lake is one of the biggest natural dam lake from hilly region

✓ third stage: " Here we live" is the final step of the project and involves achieving a model of the surroundings, model to emphasize the hilly area, vegetation, Tarnava Mare and Tarnava Mica rivers, and their confluence, and the two lakes considered natural reservation.

As work technics we mention investigation, thematic trips, group work, public debate, computer working, statistic work. To encourage students are also proposed and participation in science festival.

All pictures are made by students, in their research work, in Blaj and around Blaj, Chereteu lake and Panade lake, and represents parts of flora and fauna around Blaj.

In order to cover as wide an area of interest, students are challenged to a contest of SF Artistic and Literary creation:

"The aim of our mission was to find the answers to the questions concerning the origin of the Universe. I intend to apologize, on behalf of the entire crew, for the disappointment we created to those trusting us and our power to find the answers, in case we created any. Things went worse than we had expected. Although we reached the surface of the comet, both our physical condition and that of our equipment prevented us from finding out enough data. We cannot mention the very phenomena leading to that Big Bang, of which I assume you now know more than we used to.
The difficulties we coped with during our mission made us believe life should not be pumped in all details in order to find its significances and its rules. The sixty years spent in Snout Orion's companionship made me understand that people would always need people, feelings and compassion and not rules and theories. It does not matter to such a great extent how and where we started from, what really matters is where we are going from now on. We fought hard each of our sins, because, in that loneliness, mind shatters easily. … You have each other, so, look after yourselves. Do not pump life in order to understand it, you'd better live it and learn to live well....

Annais Kript

The man in front of the TV cameras pulled out carefully a dried, strained and torn yellowish but still around leaf from the envelope. It seemed to be at least one hundred years old…"

Marius Palermo, The twins