

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Structures for Space Education (2)

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INNOVATIONS ON SPACE EDUCATION IN VIETNAMESE HIGH SCHOOLS

**Abstract**

By tradition, Vietnam has been associated with the wet-rice civilisation. Its people have been closely linked with land and weather. For a long time, rural Vietnamese have relied a lot on Astronomy in their daily lives. Observing the night sky to set exact timetables for rice planting has been a common practice for Vietnamese peasants.

In 1947, Astronomy was included for the first time in the high school curriculum, as a part of Mathematics and to be taught by mathematic teachers. Students were provided mostly with merely theoretic knowledge. During the war time, Astronomy was taken out of the high school curriculum. In 2000, Astronomy was re-introduced in the curriculum for students of the 10th and 11th-grade class, majored in Physics, at Le Hong Phong High School for the Gifted. Recently, it was added as an optional subject in some other high schools. In teaching a subject where no education materials existed, we have encountered many difficulties. However, thanks to great efforts of our school various measures have been taken to overcome those difficulties.

The only available, official Vietnamese text book for Astronomy was the one used in the university. We, therefore, had to make innovations in order to make it suitable for high school students. New materials taken from foreign text books and Internet sources were also included while we kept the Vietnamese tradition and did not separate our teaching of space science from our traditional, poetry-loving and peace-loving spirit.

Teaching-aid materials were also non-existent, and we had to make them ourselves, using maps and charts taken from various sources and documents provided by HCM City Amateur Astronomy Club.

Our most notable achievement was the “Rotating Star Map”, our hand-made product developed using the original sky map issued by the National Geographic Society. This rotating map was well received by the participants of Asia-Pacific Regional Space Agency Forum (APRSAF) International Water Rocket Education Workshop, held in Melbourne, Australia, in June 2008.

We have carried out hands-on, minds-on projects for students, such as those for the students to find out advantages of the traditional “Lunar Calendar”, to specify the geographic coordinate of the City with crude instruments and to observe the night sky. We also significantly expanded activities using the water rockets, introduced to us by the Japan Aerospace Exploration Agency (JAXA).

The results of all our efforts indicated in the above have been very encouraging.