

THE UNIVERSE AWARENESS PROGRAMME

The Tunisian experience

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Introduction

Children, in Tunisia, are brought up in a social and cultural environment where the fact of watching the celestial vault constitutes a routine act of everyday life. They are taught by their parents, uncles and relatives to scrutinize the stars and watch the moon. In fact, in Tunisia alike the whole of the Muslim countries, the sky has always been a source of inspiration as well as a reference and a guide. Traditionally, it helps the population to accomplish daily tasks or satisfy spiritual needs. They are actually accustomed to watching the polar star for guidance or the crescent moon to guess the beginning of the holy month Ramadan, during which all Muslims have to fast, according to the Islamic precepts, from the sunshine to the sunset. Children, too, are used to observing their parents and grand parents pray five times a day at periods in accordance with the position of the sun in the sky. Any way, scrutinizing the Sun, the moon and the stars has never been a novelty for children. They are actually used to it since their relation with the sky and cosmos is part of their family's customs and traditions and even part of the Arab common cultural heritage. They feel normally and spontaneously involved in astronomy in their everyday life without being aware of it.

As far as the Tunis Science City is concerned, it is important to say that in this institution charged of popularizing science, astronomy indeed plays a very important role since the Planetarium symbolizing this part of activity represents the leading building of all its buildings. It actually constitutes an urban landmark with structure and architecture in line with the XXIst century. It was the first to be inaugurated in March, 1996, before the Tunis Science City as a whole. Besides, it celebrated its 10 years of existence in March, 2006. During all this time, the Planetarium had presented children as well as adults with fascinating shows on stars and on constellations.

Enhancing astronomy within the frame of the international UNawe programme

Being charged of developing strategies of diffusing science to the large public and particularly to the children, the Tunis Science





City has found in the international Universe Awareness programme a golden opportunity to enhance more and more its efforts to disseminate astronomy nationwide. The idea of raising economically disadvantaged children awareness to the beauty and the inspirational

and captivating aspects of the cosmos with the aim of stimulating their cognitive abilities appealed so much to the Tunis Science City's scientific teams. That's why the Tunis Science City's General Direction expressed all its satisfaction when it was chosen to be part of this international programme in 2006. Since then, it has paid particular attention to the UNAWA programme and its objectives have been actually considered a priority. It is worth noting that since the beginning of its implementation up to nowadays, the Universe Awareness project has sparked children's interest in astronomy in the whole of Tunisia.

The national action committee

This programme has been implemented so far jointly by the Tunis Science City, the Ministry of Education and Training, the Ministry in charge of Women, Family, Children and Elderly Affairs and schoolchildren and youth associations.

A national action committee, including many representatives from the above-mentioned Ministries and institutions as well as university professors, has been formed to follow up and to assess the Universe Awareness programme actions nationwide.

The activities

Since the beginning of 2006, a series of actions has been implemented within the frame of the international Universe Awareness programme and planned objectives are being reached according to expectations. Hereafter some actions undertaken:

Astronomy workshops

Astronomy workshops, designed for young children aged 4 to 10, are often organised throughout the school year. They deal with many celestial phenomena such as the solar system, the system Sun-Earth-Moon, Saturn, Venus and so on...

The purpose of all those workshops is to help children gain a clear picture of celestial phenomena.

Following those workshops, the



children are invited to imagine and to model a three dimensional structure such as paper and cardboard models so as to enable them consolidate the information they have received. Indeed, those actions have so far met with great success, particularly during school holidays. They are even organised outside the Tunis Science City's walls, in the interior of the country, for children who are unable, for financial reasons, to get to the Tunis Science City's headquarters.

Astronomy evenings

Since 2006, the scientific team of the Tunis Science City has organized a series of astronomy evenings, an evening on the last Saturday of every month, on various celestial phenomena. Those evenings have met with great success so far. Even though, it occurs late in the evening, children come in groups accompanied with their parents to scrutinize with wonder a lovely and fabulous starry night.

Telescopes, displayed here and there, are put at their service. They are, from time to time, helped by demonstrators, if they wish so, when watching the starry celestial vault. Furthermore, exposés are always given the same night on the same theme by one of the demonstrators in one of the Tunis Science City's conference rooms and thus to help the young visitors to better understand what they have seen and to consolidate the information they have yet received. The explanations are given in a way so as to help everybody understand and to keep something in mind. At the end of each exposé, a discussion is always organized to give children and even the parents the opportunity to ask questions.

Miscellaneous actions

On the occasion of the Tunis international book fair, taken place from April 27 to May 6, 2007, in the exhibition centre of Kram (close to Tunis), the Tunis Science City's scientific teams set up a mobile planetarium enabling children to attend freely astronomy sessions. The success was great. It was, too, an occasion for some of children to obtain a CD-ROMs on the solar system.

Construction of hands-on

The Tunis Science City demonstrators have proceeded to the conception and construction of hands-on exhibits, educational and scientific material and tools relating to astronomy. The purpose of all those material constructed is to better support and help educators in their activities with children in youth



mented. Those districts have been chosen according to their closeness with the Tunis Science City's headquarters. This experience will expand to the whole country in the forthcoming years.

Up to now, interesting activities have been experienced especially by educators at youth clubs such as plays relating to astronomy performed by children. The educators find it indeed interesting to teach astronomy by exploiting children's ability to create plays and tell stories. The children, at their turn, feel to be involved and learn while having fun.



Publications

CD-roms are published by the scientific team of the Tunis Science City, the purpose of which is to give children elementary notions on astronomy.

The first interactive astronomy CD-rom has been published in Arabic and deals with the solar system.