

Everyone to the botanic garden: Bringing nature closer to the children and families of Xalapa, Mexico

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Introduction

Even though more means of communication, and scientific or technological advances are available to contemporary urban societies, it is observed an increasing popular ignorance about many basic facts of the daily life. This seems not to be logical, considering the increasing influence that science and technology have not only on individuals but also the whole society.

Perhaps a major cause of this ignorance could be that people of cities are being progressively isolated of their natural surroundings, in the same way in which the cities grow in territory and complexity. A limited opening of press, radio and television for scientific knowledge at popular level has also influence. And finally, a confused management of that information, difficult for people the understanding of the global environmental situation. In this way, nature components (plants, animals, water, soil, landscape, air, etc), how they are and what they do, are more and more strange and strangers for new generations.

Mitigating this requires an intense effort of scientific knowledge diffusion, in order to compensate the deficiencies of communication with a large public. These sorts of activities are able to bring the nature closer to citizenship, and causing sensible aptitudes and attitudes, focused to sustainability.

An strategic target of the Francisco Javier Clavijero Botanic Garden, is to contribute with the creation of the public knowledge, and with the conservation and sustainable use of the natural patrimony. In this context, we have developed programmes that include a variety of educational activities. We called to our programme **Todos al Jardín Botánico** (in english **Everyone to the Botanic Garden**), which is targeted mostly to children, but also families. It is our starting point to approach different topics and themes about nature, not only the plant kingdom, to the children and families from region of Xalapa.

Antecedents

The Francisco Javier Clavijero Botanic Garden was opened in February of 1977. Over the 1980s and 1990s years the Botanic Garden became an important cultural and educational center that offered a myriad of activities for the enjoyment of local, national and international visitors. Since then it was distinguished as an environmental educational center, a cultural forum, and a beautiful place for familiar relaxation, worthy of attention by its public events and services, as guided tours, thematic exhibitions and summer courses.

In 2003, the Instituto de Ecología, A.C., a research institute in charge of the botanic garden went through a restructuring exercise which reduced considerably the funds destined to the garden's educational activities. However the education program in the botanic garden has subsisted aided by volunteers, mostly biology university students.

Todos al Jardín Botánico programme

This programme is aimed to general public. Its objective is to introduce, through practical, amused and motivational activities, information related with the nature, natural resources and sciences, and the importance to preserve the regional biodiversity and environmental services, emphasizing why they are important for the daily life in cities.

The idea is to motivate the interest in the children of city to look for answers about their nearest natural world, and at the same time, to show that FJC is a quite right place for learning.

Todos al Jardín Botánico programme works on the basis of workshops targeted for children and families. It is an opportunity to offer a practical advising about diverse disciplines of interest and daily application. Due to these activities, the FJC Botanic Garden has created a good position as a place for the education for sustainability.

The programme includes a summer course for schoolchildren in vacations, that take place during two weeks between July and August. Through this summer activities, they are motivated to participate actively for discovering nature, playing with plants, planting seeds, making art with leaves, grasses, and branches.

Topic and themes

Based upon the fact of the progressive isolation among urban inhabitants and its natural surroundings, and the consequent lack of understanding of plants, animals, natural resources as water, air, landscape, lands for cultures, etc, we have identified our topic as Natural Surroundings for People Living in Cities.

Derived from this topic, the programme approaches different themes reflected in the titles of workshops:

Theme	Titles of workshops
Spiders and scorpions have been disgusting for people, but they are important living beings	Weavers of dreams: the wonderful world of arachnids.
Cloud forest are specially diverse in amphibians and reptiles	Singers in the fog: frogs and toads.
To cultivate plants is a way to bring nature closer	Ferns bottled
There are alternative ways to produce paper	Forming sheets, reusing trees: how to make recycled paper.
Forest have an historical significance for people	Traditional Mexican wooden toys
Animals have behaviors has important adaptations for survival	How animals make friends. How animals care their babies.
Earthworms are beneficial for living plants	Happy workers of rubbish dumps: the life of earthworms
The soil is an useful natural resource	Hands of Earth, transforming the mud
There are ecological interactions between plants and animals	Mysterious nocturnal gardeners
Plants are part of our popular culture	Flying bamboo: how to make kites

Through these titles, we want to give the public the message about the varied forms in which nature components and services impact into the cities, exposing subjects related to daily life of visitors, in order to show how can be protected and maintained. This intention is essential for the Francisco Javier Clavijero Botanic Garden. The lecturers are recommended to use the less technical language, but without weakening the educational essence of contents.

Another important point is to give to the public an image of professionalism, maintaining the high quality in the presentations.

Who participates in Todos al Jardín Botánico programme?

Through almost 7 years, the programme has counted with the participation of more than 100 collaborators. An important part comes from researchers and academic technicians of the Instituto de Ecología, A.C., but it is also outstanding the collaboration of researchers and experts from other educative and governmental institutions and universities, even independent artists, musicians, painters. The follow shows some of them.

Schedule

Todos al Jardín Botánico is a Saturday morning programme. This is because it's the most favorable day for getting a more independent participation of children in the planned activities. Workshops for adult are made through Saturday or Sunday if it's possible. The mean duration is 60 to 120 minutes; for adults up to 4 hours, depending the theme.

Conclusions

Although it is not a large amount of people, the attendance to the events of the Todos al Jardín programme demonstrates that it has an ample acceptance between the public. We have received about 18000 people since 2003; Nevertheless, the general commentaries make reference to the need of a greater diffusion through the press, radio and tv, looking for a greater reach. It is also indicated that it is necessary to develop more topics related to the daily life of the people, and to relate this topics with garden's living plant collections. This could be a way to foment sensible attitudes of understanding and respect towards the nearest nature.