

KUMQUAT IN MOTION

changing dietary habits in Limburg in relation to a changing environment

Summary

The "Kumquat in Motion" project uses a new approach and demonstrates that even with few personnel, a low budget and a small garden, interesting environmental projects can be set up.

Introduction

The Botanic Garden of Kerkrade is a private garden, not linked to a university and subsidised by the local authorities. The garden has an educational service which shares responsibility for the promotion of the garden and supporting nature and environmental education in schools.

At primary school level, lessons about nature are essential. They form the basis for nature education, environmental education and health education.

Professor Johann Galtung from Oslo, a contemporary philosopher involved with questions of peace, security and environment, has distinguished four systems in which a human being functions and carries out his or her responsibilities.

- Me and myself. In particular my own body and my responsibility for my own health and lifestyle.
- Me and my direct environment. Including my responsibility for my family and other people depending on me.
- Me and my fellow human beings. My responsibility for fellow human beings determines my social behaviour to a high degree.
- Me and all other living beings on earth. My responsibility for them determines environmental conscious behaviour.

From these four systems, in which the human being functions, Galtung draws an understanding of rules that rise above the commandments and prohibitions of most religions, since it appeals to the responsibility of every single human being.

These four systems will not make life less complicated. After all, "it is much easier to be told that something is not permitted than to understand that something is immoral and therefore impossible".

The project "Kumquat in Motion"

The project "Kumquat in Motion" - changing nutritional habits in Limburg in relation to a changing environment" is based on the theory of Galtung. The *Citrus* fruit Kumquat (*Fortunella* spp.) symbolises the wealth of exotic vegetables, fruits, herbs and luxuries which have become so popular over the last decennium.

The project involves the use of a small self-made exhibition, the garden and a two hour lecture. The project aims to involve students as much as possible through practical work, experiments and research. The lecture, though complete in itself, leaves the teacher ample opportunity to explore the subject more deeply. Before giving the lecture, teachers receive a few hours of instruction in which the aims of the project are explained by someone from the education service staff.

Structure of the lecture

Me and myself

Health education aims to change children's behaviour. Since our basic needs are eating, drinking and breathing, the first part of the project deals with food and in particular, vegetables, fruits and herbs.

Everything has to be of good quality and is taken from nature. But the question we ask the children is - Is nature inexhaustible? The project emphasises that green plants are important but that our consumer habits influence our natural environment. The by-product of consumption is waste.

In spite of the richness and variety of food on offer and in the sense of choosing what is healthiest, it is becoming more and more difficult to choose the right thing. Wrong eating habits may lead to: weight gain resulting in joint pains, varicose veins, gallstones, diabetes, high blood pressure, increase of heart and vascular sicknesses (the number one cause of death, accounting for 46% of all deaths) and finally tooth-decay

(97% of small children have problems with their teeth).

The project does not intend to make students afraid of sicknesses that they may get through faulty eating habits, but it is to make them aware of the dangers of unbalanced nutrition.

Me and my direct environment

The supply and variety of fruits and vegetables have increased enormously in the last 50 years. This can be put down to changes in the environment such as; increases in numbers of foreigners in The Netherlands; travelling introducing us to foreign food; better and faster means of transport; improved cooling and storage techniques. The environment also changes due to changing nutritional habits.

This part of the project looks at how food is offered and how packing causes problems for the environment. The first system already states that waste is a side-effect of consumption. Considering that children have responsibility for their direct environment, the lecture aims to raise this awareness.

Me and my fellow human beings

This system is a component of peace education, with which this project is not directly involved. Peace education is linked directly to environmental problems in The Netherlands as well as in developing countries (we are responsible for those as well) and this brings us to system four.

Me and all other living beings on earth

Our changing eating habits directly influence our environment in far away countries. The forests of Costa Rica, for example, are cut to graze cows which are then slaughtered for hamburgers; in Malaysia, the rainforest is replaced by palm trees which provide palm oil; on the Philippine island, Negros, sugar beet is grown for Coca Cola and in Guatemala enormous coffee plantations have arisen. Where rainforest is cut, the natural environment disappears, a bare, destitute area remains, the sun dries the soil out, animals disappear and the soil is washed away. The result is a change in climate which has an effect on the whole world.

Once, the necessary information about the above mentioned systems was given at home. Much the way monkeys teach their off-spring by

setting examples. Unfortunately, for humans something went wrong with this example-setting, as far as nature education is concerned. Many children, as well as adults, are destitute of any knowledge of plants and animals. For example, in Kerkrade, a small town of ex-mineworkers, some youths believed that salami sausages grow on trees, and juniper berries are produced in factories!

Conclusions

There is a lack of basic knowledge. This basic knowledge cannot easily be taught again. Learning from one's grandmother or grandfather while playing happened without effort and once upon a time was essential. If one did not recognise which were edible plants, then one was in big trouble! Nowadays this knowledge seems unnecessary as all foods can be bought.

We, who have knowledge about nature are therefore called upon to transmit this knowledge to future generations. Only if one sees for oneself that nature is more than just a blade of grass, a big tree and a singing bird, will one be able to begin to understand it. Astonishment plays a big role in this.

At the Botanic Garden in Kerkrade we are therefore trying to transmit our message to students and other visitors by astonishing them. We do this with reduced means but with a lot of enthusiasm.

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