

## Remarkable news – March 2013

### Environmental education in Mexico

On Isabella Island, between Mazatlan and San Blas, some miles off the Pacific coast of Mexico, Joachim and I were talking about how there really should be a subject taught at schools the world over called "Ecology". Understanding how a) our behaviour, b) the energy which we use and c) the things we surround ourselves with which we have to throw away sooner or later all relate to the environment in which we live, and from which we have to take the raw materials we need, and which we are responsible for maintaining for future generations, would be such a meaningful and interesting subject to study. Knowledge acquired in other subjects could be integrated really well into this subject and tried out in practice, we thought. We also thought that such a subject, apart from being necessary in terms of understanding and examining one's own behaviour, could be made appealing for students as far as the content was concerned, if done well. So much for our theory; we had no idea if such a subject already existed or not.

Shortly after we had the above conversation, whilst in Chacala, in the Nayarit province, we were told that in a few days an environmental studies teacher would be coming to the primary school to teach the children something about recycling. We were invited to attend the event. Chacala has around 300 to 400 inhabitants and the village children are taught at the local schoolhouse. There are two classes; an elementary class and a class for higher grades. In each class, children are given individual tuition at their grade level. After school lessons, the children attend afternoon activities offered by foreigners living in the area. Sometimes it is handicrafts, sometimes cookery, and sometimes it is about the environment.

Gema, a trained environmental studies teacher, was invited by José Enrique, an architect, hotelier and former mayor of Chacala who has for years used all resources at his disposal to increase environmental awareness in the village. José Enrique was aware that it requires special skills to explain what it is all about in a way that children can understand. It was noted that Gema visits schools almost every day and knows how to convey her message to the children. After a short, introductory warm-up, she gave each child a banana to eat and they all went on a little exercise in the garden surrounding the school. Soon, there were banana peels on the ground here, there and everywhere, just as Gema had anticipated. She gave each child a small garbage bag and had them collect the banana peels and other rubbish. There was not really any rubbish lying around in the garden, but the children understood what the exercise was about, and stuffed things such as dried leaves into the bags. Back in the classroom, Gema explained to them how important it is to collect up rubbish and recycle it. She consciously limited the concept of recycling to the recycling of plastic, because this is most prominent in the lives of the school children, and because it is plastic which most often causes problems. She ended by showing the children a video in which a small boy learns that PET bottles are far too valuable to be thrown away and what happens to them when they land in the correct waste disposal container and are recycled. The film also shows ways in which many adults do not behave correctly. The video was well-made, and the children were spellbound by the images on the screen.

It is thanks to the Rotary Club that this class was possible, because next to the actual school house, it has built another building where afternoon activities can be held, and which is equipped with a projector and a screen, among other things. Children from Chacala who do well in school can apply to

the Rotary Club for a bursary to attend secondary school. In return, the Rotary Club requires those who receive bursaries to empty the wire-mesh collection bins, found everywhere in town and on the beach, in which people deposit plastic bottles.

We had agreed with José Enrique and the afternoon activity volunteer teachers that on the day after Gema's presentation, we would give an hour-long talk about our journey and plastic waste in our oceans. From our huge stock of photos, we put together a small slide show, divided into four sections. Regina, a retired German teacher, interpreted the entire presentation for us. Maria, the Mexican teacher, who had actually finished work for the day, stayed with her class, which made us happy because she had been unable to participate in Gema's presentation. That way, she will later be able to say "You remember..." and refer to what everyone saw, whenever it seems appropriate to her.

We started by showing the children the *Pagena* and how we had already travelled quite far with her, as well as the wonderful world we had come to discover on our journey. An iceberg photo and a photo of our incredible encounter with grey whales in Bahia Magdalena provoked great amazement. Pictures of animal images, particularly those animals which the children knew, were discussed in detail with the teacher. We made a point of showing them photos of Mexico and emphasised how beautiful the country is. Using pictures of a few sea birds, it was easy to show the children that these creatures live off the sea as do many people, since many of the children's fathers are fishermen. Then we showed them that it looks really ugly in other places in the world where people do not pay attention to what they do with their rubbish. Everyone thought the pictures were horrible and wanted to know where they were taken. One of the pictures came from Honolulu. It so happened that a particularly bright girl in the class comes from Hilo, Hawaii. She informed her classmates that it was very clean in Hilo. "Yes, we were in Hilo, and there is no waste to be found", we were able to confirm. "But look here. We collected these small pieces of plastic confetti from the south coast of Big Island. This spot on Big Island is not far from Hilo, and this is the kind of thing the sea washes up there", we said to the children, and passed the jar containing the plastic confetti around.

Then we showed them that all over the world, adults and children were trying to keep their environment clean, and to dispose of waste in such a way that it can be recycled. We also hoped that our photos would inspire the teachers especially to start comparable activities. Finally, we showed them a few items which had been made from recycled plastic. For some, we had only photos, but we had put a few items on display which they could touch and hold. These things were examined with great interest. We found it extremely interesting that all the children wanted to smell them! Fortunately one of the items was a bottle containing fragrant hand soap, and that the handbag and the calendar did not look as if they had been made from garbage, too. Finally, we rewarded the class for paying attention by giving them lollipops, whose plastic wrappers, of course, had to be collected by one of the older children and placed in the rubbish bin. We believe that we managed to leave a lasting impression on the children of Chacala, and now have a prepared presentation, which can be adapted easily for other places we visit.

Jill, who organised the afternoon activity, was inspired by the presentation to develop the theme of recycling with the children in the coming months in a number of ways. She was bubbling with ideas. It was Jill who told us about a school which actually does make environmental education the focus of their entire curriculum: The Costa Verde International School in Sayulita, about an hour's car journey from Chacala.

## **Sustainability School**

At the Costa Verde International School, CVIS, children from preschool to sixth year receive bilingual instruction. In addition to normal subjects such as language, mathematics, science, social studies and health/physical education, the pupils at CVIS also have lessons in ecology, languages, multiculturalism, technology, and creative arts. Aspects of environmental sustainability are integrated into all subjects and the pupils learn about the responsibility they have towards the environment. Thus, for example, languages are taught using texts and stories which deal with how the global ecosystem needs to be protected and the looming global crisis caused by dependency on fossil fuels. Likewise, mathematics is learned by the pupils by measuring sprouts in the school garden and calculating growth rate, or by counting the number of trees which will be saved by recycling paper. At CVIS, students get to grips with physics when they learn about and observe weather phenomena. In the school garden, each class has a vegetable patch in which they grow fruit and vegetables, and this activity clearly ties in with biology. Art, music, dance, physical education, and history are all taught within the concept that we are essentially and inseparably part of our environment. The CVIS sounds like an interesting school to us, and one from which many teachers can draw inspiration.

**Our bottom line: Environmental education in Mexico is – at least in the few places which we happened to get to know – remarkable!**