

Evolution of environmental education practices in Argentina; a multisensorial proposal

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Introduction

Everything started when, after 10 years of intense experience as head of the educational department at a local zoo in Argentina, we perceived (along with my wife) that it was time to redefine the term “environmental education”...And the most important shift we wanted was to think about it with the eyes of a kid... We were heading for an adventure of a lifetime and a radical change in our whole set of beliefs.

Materials and methods

We left our headquarters at Escobar and headed to Baradero, the most ancient town in the province of Bs. As. As soon as we got there, we met the leading voice of an institution with 106 years of pure history and legends. She narrated her story and immediately we were immersed in the German Asylum (Hogar Germán Frers). The place had the echoes of many generations of children, their laughs, their games and their adventures. It had been a dreamt place for childhood until changes in the Argentinean laws forced its shutting down. As time went by, the place started to lose its enchantment and was transformed into an almost abandoned place.

Seven years after that, the place started to work as a venue for volunteering programs, as an option to generate some income that could sustain its functioning, as it also provides food and support to 35 kids at risk-

Its facilities (rooms for 140 guests, playroom, dining area) are surrounded by 10 hectares (= 2.471 acres) and they include the orchard, a sports area, a centennial oak forest and a camping area. Together they provide unique opportunities to experience and discover nature.

We were instantly transported to our childhood, in every corner, tree or smell and consequently inspired. This was our kick off point to start defining with the eyes of a child. We started brainstorming different possibilities to explore the place, everything seemed climbable, sizeable, and touchable

Was this what had been introduced to us as “outdoor natural playgrounds” back in 2010 in the Programme Nature Start (held by the Chicago Zoological Society as a part of the International Early Childhood Training Program (CZS), Brookfield Chicago y and the Latin American Zoo and Aquarium Association)?

These were definitely the ingredients we were searching for to create our definition of environmental education... An activity that allowed each child to be transported into a unique multisensorial experience in profound contact with nature.

This was just the beginning of a retrospective analysis that led us to one of the oldest ways of learning, learning by playing. There was the key; “Play connected every

dot between education and nature –. We were really living the Chinese proverb that said that if we are told something, it will probably be forgotten; if we are shown something, it will probably be remembered but if we are involved in something, we will probably understand it.

We carried a small local research. We held meetings with different members of the area and started to put together facts, stories and anecdotes that were linked to tradition and culture. With great fascination we discovered the traces of prehispanic cultures, nations with a deep social and cultural identity, profoundly and respectfully associated (even in a religious way) to nature and each living organism.

Baradero is placed on the edge of a river, and we soon pictured those tribes’ life. We imagined every aspect of their days being part of this environment, of this river. The small tributaries where their routes, hollow trunks were they way of motion and gave them the possibility to reach to other spots in order to connect with other tribes. The whole ecosystem of this delta provided a balanced and varied diet which included meat from animals, large amounts of fish, vegetables and roots. They were fishermen and collectors and also cultivated beans, cabbage and corn.

These tribes were just THE example to show that a balanced use of the land allowed them to consume what they needed in a sustained equilibrium between men needs and nature.

History was to be a new ingredient in our definition. We also wanted to introduce the concept and relate it to the current human impact and the consequences that it has on our planet.

The landscape changed a lot since those tribal days. Agriculture and livestock farming have transformed the land.

Based in our experience at the Latin American Zoo and Aquarium Association, we witnessed several profound changes, that resulted in new objectives and methodologies. Nowadays we stand for a clear educational role facing alarming rates of ecosystem destruction and extinction.



Zoos are the second world's most visited places (after museums). They were initially places that invited to see collections of wild animals, now they have transformed into open spaces that have the unique opportunity of transmitting a message that seeks to generate a change in the relationship between men and the environment.

The question is now, how is the message going to be sent to assure that it is successfully received making an impact that helps us shift the actual alarming environmental situation? Are we aware that most of the information that the zoos provide can be found on the internet, on different documentaries, multimedia encyclopedias, etc. Are we really making an impact in the way the globalized society needs?

We believe we are facing a great opportunity to evolve once more. It's time To make the visit to the zoological gardens a complete experience that lasts for more than a day.

The magic we found in Baradero opened a door that needs to be analyzed. It's all about exploring, investigating, finding and experiencing nature.

YERRA –Education and Community, through HáBiTaT YERRA started to apply this view in:

- the design of playground areas,
- the adaptation of the environments for domestic animals,
- the conservation of a forest with native and exotic plants
- the implementation of educational material that aided the “explorers” in each habitat
- the transmission of ancient stories and its messages
- the careful selection of games and activities that stand for a play based education

In this way, we created the opportunity to learn by doing, celebration the great relationship that is consequently established between a broader definition of environment that not only includes plants and animals but also men considering the past the present and the future. It's also about understanding our history IN nature.

Going into the woods to discover new sounds, new adventures, new challenges that require to test our abilities and beliefs (Group work , self-esteem, trust, courage) definitely lead to be a part of nature instead of just a visitor.

Our Approach

With eyes blind-folded, we encourage children to elaborate a map that is sensory based. First they are asked to be silent and just guide themselves by following different sounds (birds, wind, creaking leaves and bushes); then sensory play is added through touching the bark of a centennial trunk, feeling its temperature in comparison to the temperature of the soil temperature; the sense of Smell is awakened by rubbing leaves. Once the activity is completed, it's time for the eyes to perceive the general picture. They soon feel empowered with this enriched view of the surrounding environment.

We also want to take with them a unique tool for survival, the ability to be calm and observe. Bird watching is the perfect activity. First they identify nesting areas, feeding spots and habits, guided by our educational material where they match what they see with the name of the bird and its description. They show great enthusiasm towards their findings and soon feel like experts.

As in every adventure. There are risks as well, so we also planned to introduce first aid maneuvers for outdoor explorers and problems solving techniques that can get us out of a risky situation using natural elements.

As the sun goes down, we build our own shelter, a multidiscipline task. Maths, strength, planning and sketching all at once, in a survival task.

Bird watching

If it is to survive, we must remain calm first and then learn to observe. Looking where the birds, in places that are fed, what they eat and where they nest, developed in this unique environment.

Once we abandon the woods, we open our way through the grasslands, a natural maze and see from a privileged view the impact of men and how the landscape was cleared for agricultural use. There, we also take some time to identify species of plants, that are lost once the land is used in agriculture.

There is also a planned visit to the orchard. Putting our hands to work, just as our ancient predecessors worked the land to produce their own food. They prepare the land, put fences and are introduced to



the different cycles and requirements of each specie.

A plus to this activity is in the tools they use. They are also made from reused materials (e.g.: the shovel is done with a plastic bottle).

Through the joint work with public organizations such as the Administration National Parks (APN), we were rewarded with a donation of 125 native trees. It was a great opportunity to get the kids involved. We prepared the land, we dig with our shovels, and soon a whole hectare became a forest with interactive paths awaiting for explorers.

Conclusion

This is the way HáBiTaT YERRA was conceived, and is evolving... as a Centre where nature can be experienced and visitors are explorers.

Image 6 In our logo we are represented by a native bird, – *Polyborus plancus* – as it plays a key role in the ecosystem and it is distributed almost all over the Argentinian territory.

More than 2500 kids aged between 8 and 12 have already been introduced to the experience of nature, being the perfect scenario for games, adventures, discoveries and ancient culture contact. They experienced nature and got their conclusions as regards human impact.

From YERRA this is the way we choose to transmit the message of conservation, a way where children have the opportunity to interact in an outdoor environment through multisensorial play, observation, comparison and experimentation. A way that leaves everlasting memories and a shift of attitude towards nature.

Our story represents the importance of including playfull experiences in nature in the design of educational programs in zoos and aquariums. Kids will treasure the experience as it was a unique opportunity to play freely in an outdoor environment.

The natural scenarios are definitely places of initiation, where we are placed as another part of the chain, as specie. The sense of being part of the same home, our planet is what needs to be cultivated.

This is the opportunity to promote a sense of empathy towards nature, that will surely translate into a feeling of belonging and an emerging need to protect it. It is the first step to generate the social change towards the conservation of biodiversity.

We invite you to just go back to your childhood memories, and analyze if you feel represented by our work.

Acknowledgements

Special thanks to Florencia Hempel for their contributions and collaboration in the translation of the document.

I thank my son, Mateo Stephan that allows me to see life through the eyes of a child.

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