**Background**

The Parque das Aves is located on the borders of the Iguaçu National Park on the triple frontier formed by Brazil, Argentina and Paraguay. From a trail through the Atlantic rainforest, that runs for 1.4 km, our visitors have contact with more than 1100 animals from more than 140 species from across the world. The Parque das Aves also works as a recovery and shelter site for birds brought in by environmental authorities. Around 50% of the Parque’s birds have been rescued from traffickers and gained a home where they can live healthily and happily.

The environmental education department develops activities for schools promoting knowledge and understanding around trafficking, hunting and mistreatment of wild animals. The team is multidisciplinary and develops projects, campaigns for the general public and attends to school groups, on average 30,000 students per year. Education programs are constructed and developed based on WAZA (2009) principles, in which education is a focus of zoos worldwide.

In 2014 the environmental education team initiated a pilot project, concerned with the continuous training of teachers on the importance of biological diversity and its protection, focusing on the Iguaçu National Park, where the rich Atlantic rainforest suffers from poaching and illegal plant removal.

The project was called “SOS Fauna” and was developed through important partnerships. At present it promotes dialogue between local institutions, as well as stimulating teachers and students from state public highschools in Foz do Iguaçu to defend biodiversity in the national park.

**Methods, Results and Discussion**

Participant action-research guided this project, in that we encouraged an exchange of knowledges. The subsequent special treatment of shared information allowed a participatory methodology (Junior, 2005). Non-formal education spaces (zoos and aquariums) are located in territories that accompany the life trajectories of groups and individuals, outside schools, in informal settings, where there are intentional interactive processes. This allows a collective process of knowledge-creation that is inclusive and welcoming and that can be understood as an “Ecology of Knowledge”.

This project invited professionals and local residents who worked in the same context to share their knowledge and perspectives in a series of dialogues. This allowed a conversation over the importance of local and specific knowledge in contributing to global knowledge, in this case relating to the Iguaçu National Park and its ecological and social relationships.

Currently there are 40 teachers participating, from 22 state schools from 3 municipalities bordering the national park. Some of the speakers and principle partners include: UNIOESTE (The State University of the West of Paraná) which certified the course through their education department; ICMBio (Chico Mendes Institute for the Conservation of Biodiversity); and the Regional Education Nucleus, who supported the project, disseminated it and connected the Parque with interested teachers in alignment with their curriculum and internal regulations (BRASIL, 2012).
The activities were presented and discussed with the project partners and later with the participants, following the approach summarized above, and being open to any changes that were necessary.

The organization, communication and reception were all realized by the Parque das Aves education team, as well as all the group activities, orientations, messages and guidelines (including those online). At each monthly meeting there was a program with speakers, conversations with the speakers, group games and snacks.

Through Facebook, the participants of the project kept in touch with each other and us. We found we had reasonable success with this social media, (see some feedback comments below for more).

In the first meeting, we explained the content of the course and also the objectives of the education department, as a zoo sector offering a structured course like “SOS Fauna”. Following WAZA (2005), zoos should make it clear to their publics that their mission is conservation, conducted with the highest levels of animal welfare. Following this, the participants were invited to come on a trail through the Parque with the theme “SOS Fauna” (here we used materials loaned by the 5th Battalion of the Paraná Military Environmental Police, we will reuse this material for the school visits in the following months).

The second meeting had as its principal speaker the environmental analyst and “poacher-hunter” from ICMBio, Ivan Baptiston. Following this there was session on pedagogic training from the education department coordinator Angela Tischner and Professor Berenice Borsoi from UNIOESTE. According to Loureiro (2007), bringing in reality, from outside of schools, and then returning to the community with educational activities creates connection between people, institutions and ecosystems. This process can be understood as an educational environment conducive to the development of a critical environmental education, which starts at school, but takes place beyond its walls.

The third meeting was structured around a conversation with PhD researcher Anne-Sophie Bertrand (University of Lisbon & ZSL), and the local farmer Silvio Guerini, moderated by Thiago Reginato from the education department. Anne-Sophie presented the results of her work looking at mammal populations over time through the national park and surrounding areas. As a complement to her scientific work, Silvio spoke of the conflicts and disputes between local farmers and the national park.

The fourth meeting took place in “Escola Parque”, the education department of the National Park and was led by an analyst from ICMBio, Mariele Mucciatto. Following this the teachers responded to a quali-quantitative questionnaire, anonymously, to evaluate the first stage of the process. The results can be seen in Graphic 01. Around 75% of the participants were present and responded. The comments from the teachers showed a variety of reactions, which we could separate into three categories: organization, content, and general and emotional reactions. Concerning organization, there were positive comments over the “reception” and the “welcome” and also with the “sequence of the project” and the clarity of the explanations. On the other hand there were many comments about a lack of time and many asked for “an increase in certified hours” which we had fixed at 60 hours. There were one or two negative comments, for example that the project-development part of the course was “unnecessary and a waste of time” or that they lacked enough orientation to help develop the project, but the majority of responses were positive. Many also suggested that the course be broadened to include more participants.

Concerning the content, there were many comments about “new knowledge” learned from each speaker...
and that “it was good to get information from people who lived in the region.” The majority praised all of the speakers and the group games and activities. Many also mentioned the utility of the content and how it will “improve my work in the classroom”.

Concerning general and emotional reactions, the participants were pleased with the “use of different places for different parts of the course”, but one of them commented that we needed a “bigger space”. Also there were various comments around “interaction with colleagues” both in the Parque das Aves during the course and on Facebook, but they commented “people should post more and visit Facebook more often.” We also found out that several participants weren’t accustomed to using social media and two were not registered.

The results expected for this pilot project go beyond pedagogical practice. It is expected to strengthen the local identity of those involved in relation to the Iguaçu National Park. We believe in a transformative education that through the zoo’s contributions, we are able to engage students, teachers and local communities to respect and care for the biodiversity of the Atlantic Forest.

**Conclusion**

Local partnerships are fundamental to valuing culture, history and local knowledge. Promoting the socio-environmental context and contribution of each participant, who has a unique sense of belonging, can enrich both content and pedagogic practice.

In this context, it can be concluded that the role of the zoo can be extended into the community in a practical and efficient way. These partnerships can increase the visibility of the zoo as a non-formal education provider and still promote the mobilization and intervention of environmental education actions in local socio-environmental issues.

The “SOS Fauna” pilot project has performed with success for our partners and principally for our participants, following the results presented above and the level of participation in the course.

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