

What Displays Work for Children?

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Ille aux Aigrettes Nature Reserve.

Zoos and aquaria appeal mainly to the visitors' need for entertainment and recreation according to Packer and Ballantyne (2002). In most cases, zoo educators are tasked with meeting these needs whilst effectively conveying zoological facts. Moreover, signs and posters are used to convey the information that we deem necessary. But what if your audience is under the age of nine years old, they are only learning to read and English is not their home language?

The Johannesburg Zoo education staff recently took on this challenge when the Farmyard exhibit was redeveloped. This article will take you through the development, implementation and utilisation of the displays for Badger Glen Farm.

Early Childhood Development (ECD)

Early Childhood Development (ECD) is a strong focal point with the United Nations and it advocates that children between the ages of three and nine years old need to be developed in a social, emotional and cognitive manner. The main concern of any ECD programme is the holistic development of a child and an institutional setting for this is of little importance (UNESCO 2002). The South African government is placing necessary focus on this as ECD is fundamental in a child's development. The limited literacy and numeracy skills at this stage have a direct impact on a child's success in their schooling career.

In the past, the Farmyard has always attracted this age group, so it seemed fitting that Badger Glen Farm be the Early Childhood Development (ECD) Centre of the Johannesburg Zoo.

Developing the Farmyard

Badger Glen Farm is an outstanding example of the keeper and education staff working together to develop an experience on the farmyard that will draw visitors and engage them through interactive educational elements. Although the education staff were not involved in the structural planning, we were involved in every other aspect. Every part of the development – be it the animal collection plan or the signage – had one guiding principle: "It has got to be fun but relevant and encourage interaction".

Through literature studies, informal discussions and focus group engagement with ECD specialists, interpretation specialist, animal breeders, animal and education staff (both internal and external); the animal collection plan was implemented and temporary displays were developed.

The animal collection plan consisted of special domestic animal breeds including a conservation project of Pedi and Zulu nguni sheep. The decision to include special breeds has attracted visitors to the farmyard as they are amazed by the size of the Buff Orpington Chicken, they have a good laugh at the



Crested Duck with the ball of feathers on its head or they marvel at the size of Vietnamese Pot Bellied Pigs' dragging tummies.

Adding educational elements

The temporary displays were trialled with various family and school groups. As can be seen from the example of a temporary sign, the format is simplistic with easily recognizable graphics and wording that is easy to read. The adults found the information on the posters interesting and the school teachers requested copies of the posters for the classroom. From this and further discussions with parents and teachers of young children, the displays were adapted and developed into what they are today.

The final products include ten A0-sized posters, four murals, a chalkboard, a playground, animal information signage, grooming brushes, interactive block displays and the animals. The interpretative displays were developed with levels of progression in mind. As the child develops its literacy level, there are different displays to accommodate them. This is better known as "scaffolding". All the displays included the same graphics so that the children could easily recognise the different animals.

Posters

Six of the ten A0 posters provide information about farmyard animals that is relevant to the curriculum that young children are taught in pre- and primary school. It included baby names of animals, male and female names, collective nouns, diets of farm animals, animal sounds and a "Did you know?" poster.

Two of the A0 posters are process diagram posters, which illustrate a simplified process of getting farm produce into the form we most enjoy... an egg sandwich or a glass of chocolate milk. It shows how the milk comes from the cow to your glass of chocolate milk or where your egg sandwich comes from. According to the literature, mind mapping or process flows such as these, helps to develop conceptual understanding and also develops creativity within children.

The last two A0 posters are interactive posters with added features that allow for a sensory experience. The grooming poster informs the visitors about the grooming process for particularly equines and which brushes are used. The different brushes have been added to the poster so that children and adults can see and feel the difference in the equipment. The other interactive poster, which happens to be my



favourite, is all about tongues! My earliest memory of the Zoo Farmyard was the cow that used to grab food from you using its long, rough tongue. The poster starts off with a tongue twister about tongues. Below that are pictures of an animal and a little box. By sticking your finger into the little box you can feel what a cat's tongue feels like, or a cow, dog, horse, duck and even a frog. Many children were cautious of this to start off but really enjoyed it, going back again and again. Through my observations of the groups and individual interviews with the children and parents, I found that children enjoyed and learnt the most from these two posters and that the children were able to interact without adults present but when adults are present there is even more interaction between them.

Why did we use this kind of format for the poster? The answer is simple, it is different! Visual text instead of written text attracts a different audience who normally would ignore a text laden poster. It also simplifies a complex process. From my observations, all of the parents engaged with their children in conversations about these posters.

Mural displays

The foundation of all learning lies in numeracy and literacy, which is a strong feature in the mural displays.



The "Day on the farm" mural depicts the day in a life of a farmer, showing his activities from the time he rises to the time he goes to sleep. Hidden within each picture is the digital time format and the children can use the analogue clock in the centre of the mural to determine the time through conversion which is a basic numeracy requirement. Two murals are related to height which allows visitors to measure themselves against different animal sizes. The one mural has three types of height measurement; hands, feet and metres, allowing for further numeracy conversions or comparison. The "Song Wall", is a sing-along about farm animal sounds. The idea originated from observing



young children walking around the zoo as they love to sing, particularly the nursery school children and they seem to know a song or a rhyme about every animal.

Animal information signage and labels

With the structural design of the farmyard, every aspect of the farmyard is on public view. As a result every part of the farmyard was labelled. The stables and night rooms are labelled and the animals that live in them are named. The tools and tack in the shed are labelled as is the food and fodder in the feed room. Through labelling everything with easy to read large font, our younger visitors can easily read the words for themselves and develop their literacy skills.

The animal information signage for the Farmyard was simplified for our visitors. Usually, the animals' signs are filled with information but for the Farmyard only the necessary text was included, simple language was used and the font was made larger which makes it easier for younger visitors to read.

Playful features

There are a number of just plain fun elements within the Farmyard. Most would say that they are not very educational as the children are just playing. Playing is behaviour displayed in animals, especially young animals, that zoologist state is an important part of a young

animal's development, as it is learning other behaviours needed to survive as an adult. It is no different for humans and playing is essential not only for the development of social skills but cognitive thinking and mean-making that happens in "play" situations, not to mention imagination and creativity development.

A chalkboard, the playground, the water fountain, the grooming brushes and the mix 'n match blocks are the fun elements included in the farmyard. On the border of the chalkboard are illustrations of how to draw different types of animals. Some of our visitors don't often have this facility at school, so they really enjoy using it at the zoo. Sometimes the artwork is questionable as it accurately depicts the anatomy of various male animals. This is educational, of course, as it is biology after all!

With the exception of the playground equipment, the mix 'n match blocks attract the most attention and with numerous comebacks from children. The mix 'n match blocks encourage the development of basic problem-solving skills and basic spelling. The basic blocks have the picture of the animal and the word split over three blocks, which was adapted from the children's game of match the head, body and tail. The second set of blocks is more complicated as the visitor





GOOSE

"Chinese"
Family: Anatidae
Scientific name: *Anser anser*
STATUS: Domestic



Photo: Louise Matschke (ZIB Zoo)

FEATURES
These probably originated from the wild Chinese goose. They can be either white or brown, and can be recognized by the knob at the base of the bill. They yield very good meat and more eggs than any other breed. They are not the hardiest of breeds.

DIET
Grass, concentrate pellets, grain.

BREEDING
They are prolific breeders and lay more eggs than any other breed.

DISTRIBUTION
Worldwide.

MASSES
Gander: 4,5 – 5,4 kg
Goose: 3,6 – 4,5 kg

DID YOU KNOW.?
Some are excellent egg-layers, managing over 80 per year, but a more reasonable number of eggs is 30-40. Younger birds achieve higher figures. Older geese produce fewer eggs.




