

Creating an interactive marine experience

by **Michelle Moodley** GUEST RELATIONS GUIDE | NPC SEA WORLD EDUCATION CENTRE AT USHAKA MARINE WORLD | SOUTH AFRICA

In the NPC Sea World Education Centre at uShaka Marine World we are fortunate to have many resources available to create an interactive and hopefully lasting impression on the minds of visually impaired children. In creating this experience one has to consider a number of factors – these are young children with a limited attention span. They need focused stimulation for a limited time period (between 20 to 30 minutes) and then they lose interest in the subject, so one has to design specific experiences to capture their imagination.

Visually impaired children rely on their senses of hearing, smell, taste and touch. Their sense of touch is heightened and, as a result, they are very sensitive to rough or sharp surfaces. One universal fact is that children will learn while they are at play so we tried to create an indoor beach area for them to utilize in our wet lab facility.

The wet lab facility is a room in the education centre that has a tiled floor and has holding tanks for live specimens and also has all of our dry specimens that are used for our lessons and courses. Three members of staff introduce and demonstrate the tasks as needed. Besides the wet lab experience, the group is also given the opportunity to experience a general guided tour through the aquarium and attend a dolphin show. Due to the group having different abilities they can also enjoy the behind the scenes experience with the dolphin training staff.

Groups of visually impaired children have been attending the education centre for a number of years and as we have suitable specimens we can offer this experience. In fact, the NPC Sea World Education Centre at uShaka Marine World has offered experiences to all groups which have different abilities since the Education Centre was created in the 1970s.

The wet lab experience

This particular interactive marine experience, which was designed in 2005, aims at utilizing the children's current abilities and to create a memorable experience for them as they would not achieve the most benefit from our existing tour of the aquarium facility. The program is designed to be 1 hour long but depending on the attention capabilities of the children it may take 30 minutes in total.

For visually impaired children aged 2 to 12 years

The wet lab facility.



The pool with seawater and soft toys is located at the centre of the room, on the floor and children can sit around the pool and play. Adding some beach sand around the pool is an option, but you will find this

Children feeling for objects in the touch pool.



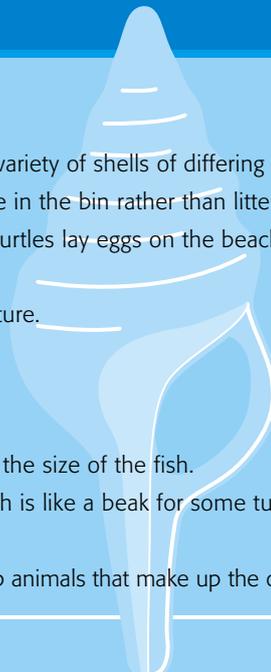
DRY TOUCH

Sandboxes –filled with sea sand

1. Treasure hunt – the aim of this activity is to dig in the sand and find the hidden items: a variety of shells of differing sizes and rubbish such as cans, packets and fishing line, which teaches them to put waste in the bin rather than littering.
2. Turtle nest – the kids get to find the eggs and hatchlings, helping children to realize that turtles lay eggs on the beach where we go to play and swim.
3. Build sand castles – if they want to, allowing them to use the sea sand and enjoy the texture.

Dry specimens

1. Shark skin – rough grainy texture like sandpaper, due to skin teeth (dermal denticles).
2. Stingray teeth – flat pavement teeth, like two rolling pins, to grind and crush food.
3. Large fish – touch scales, eyes, teeth fins and the whole body, allowing for exploration of the size of the fish.
4. Turtle – touch the hard and sometimes smooth shell, the head, and the mouth area which is like a beak for some turtles according to what they feed on.
5. Coral limestone skeleton – rough sharp edges, to teach the children about the colonial polyp animals that make up the coral.



WET TOUCH – very stimulating for visually impaired –

The caregivers remarked that touching water is a great experience so this knowledge is used in the following way:

1. Touch and smell – two types of algae in seawater for the kids to touch different textures (leafy and stringy).
2. Touch and smell and taste – pool filled with sea water holding soft plastic toys. Children have to find these animals and staff are on hand to help them to identify by characteristics e.g. how many legs does it have – crabs, eels, fish, octopus. They can taste and smell seawater using a spray bottle to create sea spray.
3. Live touch – a black sea cucumber is placed in a dish of sea water and children are allowed to touch – soft bodied animal with pliable texture.
4. Touch – box of homemade jelly/gelatin (like touching a real jellyfish). This is a definite favourite. By the end, this is a box of jelly mush – great sensation for the children to squeeze the jelly between fingers.
5. Smell and touch – fish food (sardine, redbait, mussel, squid, prawn). The children enjoy the different textures and they smell their hands after the touch.

creates a real mess when you need to tidy up. Around the pool there are sand boxes and dry touch specimens. On a counter there are items for the wet touch experience: the dish with jelly, algae in seawater, live sea cucumber and the food from our own aquarium kitchen – sardine, squid, redbait, prawn. When the kids are finished enjoying this experience they will need to clean up so a bathroom or basin area to wash up, preferably in the near vicinity is essential.

This particular activity does not include many sound effects as these children had been exposed to the dolphins and the sounds they made earlier in the day; when the children are accompanied to our back-of-house area where the dolphins are housed, they are given the opportunity to touch some of the food (fish) that can be fed to the dolphins. During this experience, they will hear the dolphins perform natural calling sounds to each other.

These activities certainly open up a whole new world to a group of visually impaired children, who may otherwise never have fully experienced our aquarium or the

Touching a sea cucumber.



marine environment. They leave the facility having thoroughly enjoyed them and learnt a little more about the world around them. Although there has been no formal evaluation of the experience, the children and the accompanying caregivers (adults) have reported positive and enlightening feedback e.g. water is an effective stimulus for these children and any water based specimens are memorable. ♦

Author Contact Details: Michelle Moodley | mmoodley@seaworld.org.za