

# Keeping the Learning Real in Australia and New Zealand

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**What do students need to know and be able to do? How can zoos support students to gain the knowledge, skills and behaviours necessary to succeed in a future that is innovative, sustainable and builds strong communities? This is the challenge that many Australian and New Zealand education departments have put to schools and external education providers such as zoos.**

We are being asked to deliver teaching and learning programs that support students to develop capacities to confidently manage themselves and their relationships with others, make sense of the world in which they live and effectively participate in that world. Zoos Victoria, encompassing Werribee Open Range Zoo, Healesville Sanctuary and Melbourne Zoo, is taking up this challenge by focusing on programs where students are involved in authentic learning experiences with real outcomes.

Authentic learning can be promoted through many experiences in zoos from mealworm breeding or fodder collection at school, to building nest boxes for endangered native species or developing a framework for the ethical selection of products for sale in the zoo shop.

In keeping learning real, Discovery & Learning (the education service at Zoos Victoria) has been re-imagining the world of learning and dreaming how we want students to be involved in conservation through our zoos. We have developed a framework for our different zoos where all learning experiences will provide authentic and real-life learning and teaching experiences that recognise and respond to diverse students needs, as well as provide opportunities for partnerships between schools and the community. An understanding of our role in the natural world is key to our interactions with visitors. Links between schools and local or global communities are facilitated to enable students to 'make a difference', along with developing meaningful skills and knowledge. Here are some examples of how we have applied this approach to conservation education.

## Authentic Learning

THE AUTHENTIC LEARNING APPROACH IS VALUABLE IN EDUCATION, AND IN PARTICULAR CONSERVATION EDUCATION. AUTHENTIC LEARNING INVOLVES CONSTRUCTING REAL LEARNING EXPERIENCES AND AUTHENTIC ASSESSMENT ACTIVITIES FOR STUDENTS THAT SIMULATE LEARNING IN REAL LIFE. IN THIS APPROACH, STUDENT CONTRIBUTIONS ARE SHOWN TO BE IMPORTANT, VALUED AND MEANINGFUL – AND THIS IS USED AS A DRIVER FOR STUDENTS TO TAKE ACTION. STUDENTS ARE EMPOWERED TO TAKE GREATER OWNERSHIP AND RESPONSIBILITY FOR THEIR LEARNING, AS WELL AS DEVELOP INTERPERSONAL, COMMUNICATION, PROBLEM-SOLVING AND TIME MANAGEMENT SKILLS. AUTHENTIC LEARNING EXPERIENCES ENGAGE STUDENTS IN LEARNING PRACTICAL SKILLS, DISCIPLINE-BASED LEARNING AND BEHAVIOURS THAT PROMOTE LIFE-LONG LEARNING SUCH AS THINKING, MANAGING PERSONAL LEARNING AND COMMUNICATION.

## Trees, Paws and Claws – Werribee Open Range Zoo

A new Discovery and Learning program, Trees, Paws and Claws, facilitates students' understanding of the issues surrounding the loss of local wildlife and habitat. Students and teachers are provided with the opportunity to connect with wildlife that previously lived along the Werribee River corridor. Students discuss the needs of species that remain living within the remnant habitat and schools are inspired to sponsor a native species that live or once lived along the Werribee River.

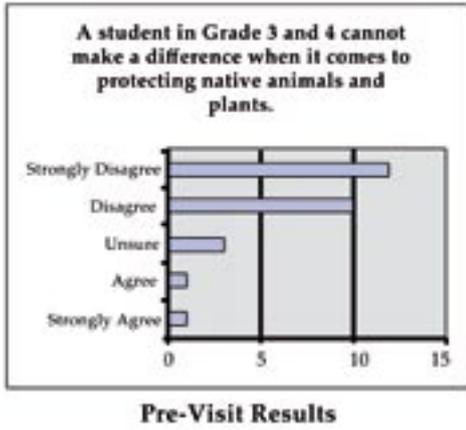


Figure left Research into student attitudes towards their local environment in the Trees, Paws and Claws program, pre visit

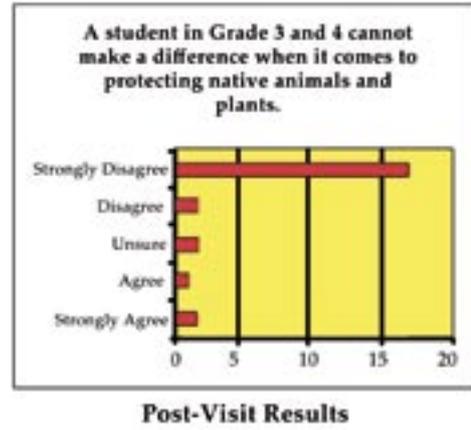


Figure right Research into student attitudes towards their local environment in the Trees, Paws and Claws program, post visit

Classes are encouraged to conduct further research back at school and to raise community awareness.

Greenfleet, a not for profit organisation that works to offset greenhouse gases produced by cars, utilises funds raised through the program to plant trees along sections of the Werribee River. By contributing to the reconstruction of habitat for local wildlife, as well as assisting in reducing the effect of greenhouse gases, students are able to consolidate their learning throughout this authentic experience. Students' longitudinal learning opportunities are increased, as learning is extended beyond the classroom and the visit to the zoo. Although fundraising is important, much emphasis is placed on the processes used and the awareness raised within school and local community as a result of fundraising efforts.

After a hands-on encounter with a species that once called the Werribee River home, students venture down to this remnant patch of habitat and assess the impacts of European settlement. In this habitat assessment, students are encouraged to think about what changes

would need to occur before the Werribee River could once again become suitable habitat for many native species. Students are empowered to generate ideas on how they can take action to assist these native species along the Werribee River and in their own local community.

A local primary school, Corpus Christi Catholic Primary School, was the first to integrate the Trees, Paws and Claws learning experience into a Term 3 inquiry-based unit. Research into student attitudes towards their local environment before and after they participated in the learning experience, show that learning has been achieved and opinions changed about the value of conservation efforts as a part of this innovative program. Students connect with native wildlife in this 'hands on' experience to build the foundations for a future in which humans live in balance with the natural world. The Trees, Paws and Claws program extends beyond just knowledge development towards behavioural change where students begin to take action for a sustainable future.

Student planting a tree for native species in the Trees, Paws and Claws program



### Planet Keeper – Melbourne Zoo

The Planet Keeper program is a great example of a partnership between middle year students (year levels 5-8), teachers and a zoo. Students are encouraged to take positive steps, by raising awareness and funds, to support field conservation efforts for endangered species. Melbourne Zoo is currently focusing on the Sumatran Tiger and students can be involved in the Planet Keeper Tiger Team. Students' longitudinal learning opportunities are increased with this program as learning is extended beyond the classroom and the visit to the zoo. Emphasis is placed on the processes used and what can be learnt from them, so that students can continue to be involved in conservation and inspire others into action.

During the Planet Keeper zoo visit, students learn by engaging with zoo educators and keepers in special learning experiences with the endangered species. Some of the activities that students may participate in are a behind-the-scenes with the tiger, 'meet the keeper', or a radio tracking activity to role-play researchers tracking tigers in the wild. In the 'hands on' session, students examine tiger artefacts and confiscations to explore the threat of poaching on tigers. Following the zoo visit, students are encouraged to take action by raising awareness and funds in their school and local community.

Students demonstrate increased level of engagement in this authentic experience as they are empowered to

decide how they will raise awareness and funds for the Sumatran Tiger. Teachers have noted that the school and local community is also learning about the tiger campaign. The Planet Keeper program model can be applied to any endangered species or habitat. Zoo educators are working with other departments to choose the next campaign species or conservation program. We can extend on this program by building further bridges between the zoo and school community through sharing stories on the Planet Keeper website and through our regular newsletter to schools. This program can be sustained with schools maintaining a long-term connection with this endangered species.

### Vet for a Day – Healesville Sanctuary

Students participating in the Vet for a Day Careers Program examine rare and endangered native animals, learn about captive breeding programs and consider animal health issues under the guidance of Education Officers and Sanctuary Veterinarians. How many school students have actually touched a tiny Sugar Glider or scanned a snake for a microchip? How many young prospective vets have a chance of solving capture and release problems with a practicing wildlife veterinarian? Later years students (year level 9-12) who are at a decision-making crossroads in their career focus and subject choice can learn about where their own career choices may take them. Students have an enjoyable opportunity to interact with animals and with the experts and professionals who work with animals.

Behind the scenes with Binjai, a female Sumatran Tiger, during a Planet Keeper session at Melbourne Zoo





The day is carefully constructed and begins with case study details, observing and examining animals with the vets and exploring the Sanctuary's Wildlife Health Centre. Students also join the vets on their rounds and participate in various activities throughout the day such as the use of syringes and stethoscopes, looking through an otoscope to extract a grass seed from an animal's ear, comparing the bones of an avian wing with a human arm, counting the number of babies in a pregnant reptile's X-ray and practice suturing techniques on a toy animal.

A primary goal of the Vet for a Day program is to provide an opportunity for young people who passionately care about animals to gain a real-life experience and to test their level of interest against a benchmark set by experts and professionals. The program also aims to help young people develop their expertise and commitment to protecting animals, from a range of perspectives: intervention in their health; protection and care of captive species; rehabilitation, diagnosis and research into captive breeding; and studying the interactions between humans and animals.

An analysis of written evaluations received from participants revealed extremely positive results: 100% of participants said the day would help them to achieve their future goals; 70% valued using technology for helping animals and for captive breeding programs; and 90% rated the post mortem as the best experience of the day. The Vet for a Day program, winner of our regional

Education Award in 2006, was highly commended by the Australasian Regional Association of Zoological Parks and Aquaria for its innovation and for linking wildlife health with environmental health for the next generation of leaders.

Vet for a Day connects young people with wildlife, inspires them with the dedication to make a difference, and educates them to develop confidence in setting their goals, to attempt new skills and to share their learning. Mentoring by the vets in this program encourages attitudes and behaviour sensitive to conservation. Vet for a Day offers an opportunity for students to be empowered to create change and participate actively as agents of change in all the ways in which communities interact with wildlife.

### **The authentic learning challenge**

Zoos are uniquely placed to deliver authentic learning experiences with real settings and meaningful outcomes, along with experienced and passionate staff, that connect and engage students with learning. The unique environments at three zoos in Victoria, Australia provide real life learning and provoke discussion of large important issues. As an innovative learning resource, zoos can facilitate students' connection with wildlife and communities, both locally and globally. Are you up for the challenge? How will you support students in gaining the knowledge, skills and behaviours they need to succeed in the future? For more information, see [www.zoo.org.au/education](http://www.zoo.org.au/education). ◊