

Visitor Based Conservation Campaigns at Zoos Victoria



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The processes threatening biodiversity across the globe are numerous and varied, yet the majority have one thing in common – humans. Zoos therefore have the potential to conserve wildlife by influencing the very people that walk through their gates each year.

Research suggests that generations XY and Z are fatigued from lofty ‘you can do this at home’ style messages. They like to do things now, not later, and expect the links to be tangible (Mindbranch 2008). This is great news for the 21st century zoo because contemporary theories emerging from the social sciences provide us with similar sets of advice for designing behaviour change campaigns. Zoos Victoria has trialled an education for sustainability model that has proven to successfully influence people to take action for conservation since 2005. The success of this model has extended conservation education beyond formal school learning experiences and into visitor based conservation campaigns.

Facing the facts – Zoos aren’t schools

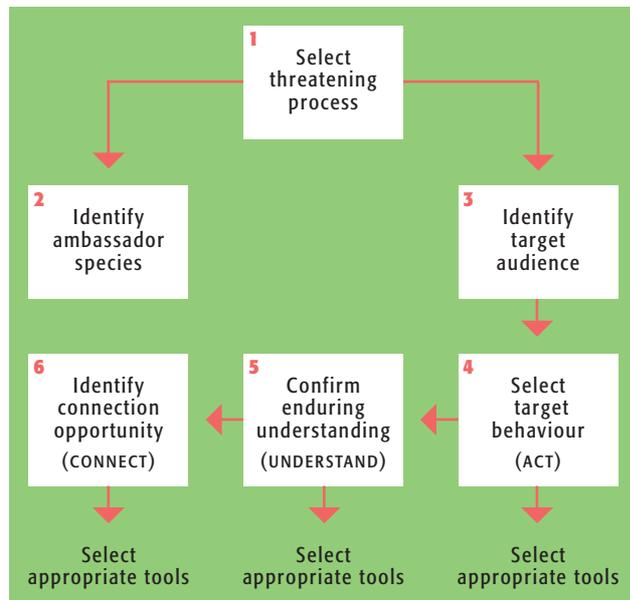
In 2005 the education team at Werribee Open Range Zoo evaluated the effectiveness of their education programs. Teacher feedback was typically very positive, expressing high levels of student engagement and satisfaction. However what the zoo educators really wanted to know was are the students being influenced by their sessions? Did they go on to install a nest-box within their school after their Habitats Under Threat session? Did they go on to plant native grass species within their local area after participating in the Grassland Ecosystems class? And did any schools construct a frog-bog within their school grounds after learning about local endangered species?

The results from the post-visit teacher calls conducted at the end of the year were sobering. Although the programs were effective at raising awareness of environmental issues, they had not proven to be effective at influencing behaviours. The education teams desire to develop and deliver programs aligned with the aspirations of a 21st century zoo (WZACS 2005) motivated them to rethink, redevelop and readjust their education approach.

A range of education models were investigated, and the team looked beyond learning theories that simply rested within the formal education (and often school based) realm. The educators challenged their thinking and pedagogy by drawing upon approaches and tools trialled and utilised in industries such as health and marketing.

It did not take long before it had become evident that zoos were a unique and complex learning space that required an education model designed to cater for its own unique set of learning ambitions and objectives. The zoo education experience should be fun, experiential, student centred and motivating. It should inform students of current, relevant issues, and inspire them to take action. The experiences should be age appropriate, and should cater for a variety of learning styles. A well-designed zoo learning experience should offer opportunities for students to emotionally connect with wildlife and promote enquiry. What ready-made

Figure 1 C-U-A zoo-based conservation model.



1. **Select Threatening Process** – Ensure it is relevant to your visitors (i.e one they can influence).
2. **Identify ambassador species** – Selecting a threatening process that impacts an animal ambassador within your zoo provides greater opportunities to engage visitors with both formal and informal learning opportunities once the program has been developed.
3. **Identify target audience** – If the students or public visiting your institution cannot influence a conservation gain for wildlife by changing their behaviours, then select another threatening process. This step ensures that you do not develop education programs or campaigns that simply raise awareness about conservation without providing tangible ways for people to contribute.
4. **Select target behaviour** – Identify one behaviour that you would like to influence people to change that would alleviate the threatening process. It is also important at this stage to consider how you will evaluate and measure the success of the behaviour change component of the program (selecting visible behaviours can help this process).
5. **Confirm enduring understanding** – Identify an understanding that compliments your selected threatening process and target behaviour. This is often an ecological understanding. Ham (1992) encourages the development of themes as a way of ensuring that presenters stay on track and avoid overwhelming people. Theming presentations also leaves visitors to zoos with a lasting thread of information rather than a set of facts and figures that will soon be forgotten. Enquiry based learning models (Murdoch 1992) also provide methods for identifying enduring understandings.
6. **Identify connection opportunity** – Zoos have enormous potential to ignite emotional connections between people and wildlife (Smith *et al.* 2008). Consider ways in which your visitors can get the opportunity to ‘connect’ with your selected ambassador species by employing a range of tools that enhance the likeness to arouse emotions.

education model achieves that? None that we could find! This ambitious set of expectations led to the development of the Connect-Understand-Act conservation education model.

The Connect-Understand-Act (C-U-A) model was used to develop and trial a number of zoo based education programs across the following two years. Evaluations at the end of the first year indicated that 88% of students participating in an endangered species program went on to take action for wildlife. Through facilitating onsite conservation action opportunities Healy (2006) highlighted that student interest, satisfaction and learning was higher than usual due to the tangible links to conservation.

In 2006 the model was trialled within rural Zimbabwe. The success of this program indicated that knowledge and skill acquisition as well as attitude and behaviour change could be achieved for student learning using the C-U-A model (Lowry 2007). Knowing now that the model can effectively connect children with wildlife, teach ecological understandings and inspire conservation action without geographical limitations, the question was then raised, was it limited to school children? The following year saw the C-U-A trials extend to cater for informal learning experiences encountered by the remaining 90% of our zoos visitors.

Connect - Understand - Act – A conservation education model

Drawing upon contemporary learning theories and embedding behaviour change tools from behaviour change approaches such as community based social marketing (Mackenzie-Mohr 1999), the following conservation education model was designed to influence the development and delivery of education programs within Zoos Victoria.

Secondary school student erects nestbox within the school grounds.



Photo © Rachel Lowry / Zoos Victoria

Just as it is ineffective to simply tell a person to ‘love’ or ‘respect’ an animal, it is equally ineffective to ask a person to change their behaviour and expect them to do so (McKenzie-Mohr, 1999). However you can select appropriate tools that when designing an education experience, make it more likely to successfully connect, teach understandings or influence behaviours. Figure 2 below outlines a variety of ‘tools’ trialled across both formal and informal learning experiences at Zoos Victoria.



Figure 2 A list of ‘tools’ that can be embedded within the C-U-A model to enhance the effectiveness of the conservation education program.

CONNECT	UNDERSTAND	ACT	ESSENTIAL
Tactile Experiences	Themed	Targeted behaviour	Multi-sensory
Close encounters	Games	Remove barriers	Comfort
Eye contact	Interactive	Convenience	Appropriate setting
Encourage observations	Layered/targeted	Incentive	Fun
Storytelling	Thought provoking	Eco-badging (appeal to image)	Themed
Characterising animals	Analogies	Social norms	Targeted behaviour
Role play/drama	Comparisons	Likeness	Layered/targets audience needs
Discovery	Visual aids (props)	Walk the talk	
Unexpected/surprise	Relevant	Join others (link)	
Mimicry	Appropriate questioning	Relevant	
Privileged insights	Role-play	Feedback	
Reflective pauses	Storytelling	Tangible action	
	Anecdotes	Access experts	
	Reinforcement (of skills, knowledge and behaviours)	Commitments/Pledges	
	Encourage observations	Prompts	
	Reflective pauses		

They’re Calling on You – A case study

In 2008 Zoos Victoria developed an informal learning experience in the form of a visitor based conservation campaign titled ‘They’re Calling on You’.



The Connect – Understand – Act model guided the design off the visitor based conservation campaign.

- 1. Select Threatening Process** – Coltan mining which currently takes place within the Democratic Republic of Congo (DRC). Coltan is used to coat the capacitors of electronic devices such as mobile phones and although the mining is illegal, it continues. The mining cuts pathways into primate habitat exposing them to poachers.
- 2. Identify ambassador species** – The western lowland gorilla. Although coltan mining in the DRC does not directly impact western lowland gorillas (*Gorilla gorilla gorilla*), eastern lowland gorilla populations

(*Gorilla beringei graueri*) have been significantly impacted.

- 3. Identify target audience** – Mobile phone users (therefore people from the age of 12 and up).
- 4. Select target behaviour** – Donate your old mobile phone to the They’re Calling on You program at Melbourne Zoo. This donation enable the Aussie Recycling Program (ARP) to make new phones from old phones which in turn raises much needed funds for primate conservation.
- 5. Confirm enduring understanding** – Everyday actions such as purchasing or disposing of a mobile phone can impact wildlife both locally and globally.
- 6. Identify connection opportunity** – Keeper talks were seen to provide the best opportunity to conduct story telling whilst weaving in the enduring understanding and delivering the facilitated call to action. Performance is also currently being trialled to ‘hook’ visitors to the key message.

Mobile phone recycling satchels were used within the ‘They’re Calling on You’ program to remove behavioural barriers.

**They're
Calling
on You**
– A case
study

The ultimate aim of the 'They're Calling on You' mobile phone recycling program is to:

- Divert mobile phones from landfill
- Lessen the demand for coltan mining by providing the coltan-coated capacitor in mobile phone with a second life (achieved by forwarding all mobile phones to Aussie Recycling Program for refurbishment).
- Raise money to support primate conservation through the sale of refurbished phones (funds are donated to Jane Goodall Institute Australia to support *in situ* conservation and Melbourne Zoo to support *ex situ* conservation)

The 'They're Calling on You' mobile phone recycling program has provided Melbourne Zoo with the opportunity to impact primate conservation through their visitor actions. The success of the 'They're Calling on You' program has confirmed that the C-U-A model can also yield positive results when utilised to design informal experiences for general zoovisitors.

Since the program began in October 2008, the following milestones have been reached:

- more than 8000 phones have been donated (approximately 1000 phones per month)
- more than AU\$13,000 dollars has been raised to support primate conservation
- 57 large corporations have registered to the program, committing their retired mobile fleets
- media communications have raised the profile of the program and Melbourne Zoo.
- 60 schools have signed up to conduct mobile phone drives

Barcodes have been placed on the satchels to enable us to track points of influence. 28% of mobile phone recycling satchels handed out at keeper talks have been returned to date. Satchels taken from dispensers at the front and back exits of the zoo have had a 4% return rate (an industry standard). The Melbourne Zoo website has also been utilised to facilitate the call to action, allowing people to download postage free labels to send phones from home at no cost. Thousands of people have visited the campaign website and the success of the three month trial period at Melbourne Zoo has motivated ARAZPA to adopt the program as a regional campaign throughout Year of the Gorilla.

Conclusion

Zoos are unique learning environments that require a tailored approach to conservation education to suit the context and purpose of the 21st century zoo. The Information Intensive model has proven to be ineffective at

inspiring conservation action. Since 2005 Zoos Victoria has trialled an education model that combines contemporary learning theories with behaviour change tools recommended by social scientist such as Mackenzie-Mohr (1999).

Jane Goodall during the launch of the 'They're Calling on You' program.



As zoos begin to design conservation education programs that cater for generations XY and Z they will need to keep the messages short, sharp and engaging and wherever possible fun to experience. Selecting threatening process that are relevant, and easy for people to contribute to will be essential, and placing more emphasis on facilitating actions rather than delivering information will be critical. Once zoos can demonstrate their potential to contribute to wildlife conservation through visitor based conservation campaigns, our relevance within the 21st century will be solidified and we will have a new set of reasons to drive visitation to our zoos.

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