



Teaching resources - 'Animal Welfare',
Experience 2 – Caring for animals through enrichment (STEM)
Year 7 – 10 (secondary)

Dear teacher,

Thank you for choosing to visit Zoodoo with your class. By selecting this curriculum-aligned learning program, your students will deepen their knowledge of how to care for animals through learning to design habitats that promote their welfare. Students will build on knowledge of animals' needs and affective states they learn about at Zoodoo and use this information to design an enrichment idea that allows animals to exhibit natural behaviours. Through this STEM-focused program, students will gain greater appreciation of zoos' role in conservation and will be able to extend this knowledge to the animals they keep at home. Students will vote on the best enrichment idea which will be trialled at Zoodoo.

Zoodoo is a signatory to the World Association of Zoos and Aquariums which aims to enhance animal welfare in zoos across the globe through its '5 domains' framework. Zoodoo takes animal welfare seriously and implements it to meet the needs of our animals and show leadership in sharing these concepts with school communities and the public.

Curriculum outcomes of Zoodoo experience	
Australian Curriculum Content descriptors (Y7-Y8)	<p>Main curriculum outcomes (Design Technologies):</p> <p>Y7-8 [...] investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas (ACTDEP035)</p> <p>Select and justify choices of materials, components, tools, equipment and techniques to effectively and safely make designed solutions (ACTDEP037).</p> <p>Y9-10 select an increasingly sophisticated range of materials, systems, components, tools and equipment to develop design ideas (ACTDEP048)</p> <p>Develop, modify and communicate design ideas by applying design thinking, creativity, innovation and enterprise skills of increasing sophistication (ACTDEP049)</p> <p>Work flexibly to effectively and safely test, select, justify and use appropriate technologies and processes to make designed solutions (ACTDEP050)</p>

General capabilities	Critical and creative thinking, literacy, numeracy, ICT
UDL provisions	Most tasks allow for multiple modes of interaction (speaking, pointing, using electronic interfaces to record / decode information, writing, reading). Students choose how they want to record their observations and how they will approach the design task.
Other skills enhanced	Communication (presenting), teamwork, knowledge of ethical treatment (animals), STEM fields

There are three parts to this learning package:

- A) Teacher information for all phases of the experience (this document, scroll down for further details).
- B) Behavioural guidelines (access them on the main school excursion web page)

The lesson sequence is structured as follows:

- 1) **Preparatory lesson (1 lesson)** – In groups, students will brainstorm what they think is involved in animal care and present their findings to the class. Through comparing ideas, students will realise that much is involved in taking care of animals. But how do we decide what is appropriate and are zoos trustworthy institutions of animal care? Through discussing these questions, students will be prepared to engage with the content presented at Zoodoo.
- 2) **Zoodoo visit** – When students visit Zoodoo, they will get to know about the animals we keep at Zoodoo and how we cater towards their wellbeing. Students will be familiarised with the ideas of enrichment and will record animal and housing facts as well as observations. They will also see the difference in Tasmanian devil behaviour through the introduction of an enrichment object. In pairs or threes, students will use begin planning which animal they would like to design enrichment for.
- 3) **Concluding lesson (classroom, 3-4 lessons recommended)** – Once groups have agreed on a focus animal they saw at Zoodoo, they will begin the design phase for a behavioural enrichment object. Firstly, students will produce a flowchart that includes all the steps needed to complete the final version. This will include intertwining research of the animal’s natural behaviours, animal welfare considerations, and materials or strategies they would use for enrichment. After the flowcharting phase, students will construct/develop an enrichment idea using a variety of materials to meet its intended purpose. Finally, students will present their work. With permission of students/parents, the educator will receive recorded footage of students’ creations and, through discussion with the keepers, will select a winning design. We will record our own footage showing via video (which we will share with your class) and witnessed live by the public to build awareness about enrichment as an asset to managing animal welfare. (For further details, see the activity overview below)