

Living with Tiger Snakes

WESTERN AUSTRALIA

The aim of each School, Community Industry partnerships in science (SCIPs) Partnership Project was to promote scientific literacy in the school and wider community.

The Australian Science Teachers Association (ASTA) with funding from the Australian Government Department of Education, Science and Training (DEST) established and managed the SCIPs Project 2004-2005.

Students: Middle school students, in Years 4 to 7 at Chrysalis Montessori School.

Project

Partners: Roger Harris - Centre Manager, Herdsman Lake Wildlife Centre, WA Gould League Inc.
Elaine Lewis - Science Teacher, Chrysalis Montessori School, Glendalough

Local project

focus: To address the fear and ignorance of living with Tiger Snakes through involvement of local school children in a snake education program and production of a range of snake interpretation material for local community reference.

Tiger snakes are a common sight in the surrounds of the Herdsman Lake Wildlife Centre, the largest wetland with a major population of Tiger Snakes within the Perth Metropolitan region. The Centre handles hundreds of calls annually from members of the local community who have found Tiger Snakes in their backyard. Students from Chrysalis Montessori School are near Herdsman Lake and regularly see Tiger Snakes in their local area and backyard. The fascination/fear factor was the motivation for students to learn about their wildlife environment.

The *Living with Tiger Snakes* project was co-ordinated by Roger Harris, Centre Manager, Herdsman Lake Wildlife Centre, WA Gould League Inc. Students from Chrysalis Montessori School investigated and recorded local Tiger Snake activity and designed a range of snake interpretation tools for use by the local community.

What happened?

Students visited the Herdsman Lake Wildlife Centre on four occasions to work with snake experts in order to develop understandings about snake behaviour, appropriate ways for people to behave when living near a snake habitat and what to do if they see a snake. Students conducted surveys, collected, collated and reported on snake data such as snake sightings and behaviour. They worked with experts in snake behaviour with snakes from W.A. Reptile Park.

The industry project partners played a vital role in this project, providing project co-ordination and leadership, introduction and supervision of specialist learning experiences and resources, and the project venue for the community open night. The school co-ordinated the excursions and integration of the project with the curriculum, learning program and common assessment tasks for students as well as managing the inter-school and community relations. The project partnership was documented through a Memorandum of Understanding which included a strategic and action plan.

The school and community were kept informed about the project, the student's roles, the results and the science involved, through student presentations at a 'Living with Tiger Snakes' community open night. They conducted a community survey (in conjunction with the invitation to the open night), to determine the community's perception of snakes.

Based on student designs,  Dr Mitch Ladyman, Snake Expert, changing community attitudes towards snakes

interpretation signs were produced for display at the school and wildlife centre, along with an information brochure, Tiger Snake Badge and business card-sized wallet cards that included snake-bite first aid information.

Live snakes courtesy of West Australian Reptile Park, Henley Brook, WA.

What was achieved?

The project was an outstanding success, enabling students to achieve a range of educational outcomes from a number of WA Curriculum Framework Learning Areas. It was a best-practice example of problem solving, and an open-ended approach that demonstrated their competency to work scientifically. Students took enthusiastic ownership of the community problem.

Students were given a great deal of responsibility in running the community night. They were outstanding in their reporting

of snake behaviour, community survey findings and the creative range of interpretation tools. They acquired a new range of skills to achieve their high standard of presentations. For example, creating Excel graphs to report on survey findings, model construction, using a scanner, designing PowerPoint presentations.

A key contributor to the success of the project was the project-based nature of the learning, in which the students of the school excelled, and the enthusiasm of the students due to the high relevance and exciting nature

of the topic. Students were additionally motivated through a sense of civic duty, solving a community problem which would save people's lives and the lives of tiger snakes. Roger Harris, Project Co-ordinator.



Student model of a friendly snake garden

The Project Co-ordinator was impressed with the commitment of the teachers, the strong community links and parental support.

I will be using this project as an example of best-practice teaching pedagogy when conducting professional development to student teachers. Roger Harris

Over 100 community members participated in the Snake Education Open Night. Student presentations included *How to keep a snake unfriendly garden, Tiger snake ecology and behaviour to First aid for snake bites*. About 95% of participants indicated they had a more positive attitude towards tiger snakes as a result of the student activities and 90% felt confident they would know what to do if they sighted a snake or needed to used first aid on a snake bite.

Following the open night, a number of enquiries for additional open nights were received by the Centre.

The project is an example of best-practice environmental education with project-based learning that is part of the student's experiential world. Roger Harris

The program was able to demonstrate the values of social, civic and environmental responsibility. The Science Learning Outcome of Life and Living was addressed by educating students about organisms, the environment, food chains and food webs. Additionally, with respect to integration, six of the seven remaining learning outcomes were also addressed as outlined below:

- Society and Environment - Active citizenship through participation in survey data collection and presentation at the community night, contributing to a snake safe neighbourhood
- The Arts - Role plays, posters, badges, dioramas, computer graphics

- English - Script writing and verbal presentations
- Technology and Enterprise - Surfing the web and power point presentation development
- Mathematics - Collating and computing the data; development of graphs
- Health and Physical Education - Learning and demonstrating first aid; learning about the differences between venomous and poisonous snakes; learning the precautions to take while bush walking.

Learnings

The key to the project's success was the commitment, dedication and in-kind contributions made by the Chrysalis Montessori School staff.

An important planning consideration is ensuring the objectives of the project can be achieved in the time frame.

Where to next?

The SCiPS Project was the catalyst for the partnership between WA Gould League and Chrysalis Montessori School and with the success of this project there is every possibility both partners will work together on similar community environmental education projects in the future.

The school curriculum and web information developed through the project will be used by WA Gould League and be available to all other schools.

The community interpretive material produced by students will be on display at Chrysalis Montessori School and at the Herdsman Lake Wildlife Centre. This material will also be the basis from which additional interpretive material will be designed by WA Gould League.



We went for an early morning walk looking for tiger snakes.

SCiPS Grant

The \$3,000 SCiPS Partnership Project grant assisted with transport for students to the Wildlife Centre, student consumables, promotional materials and community open night costs. WA Gould League Inc. provided the project co-ordination.

For more information

Living with Tiger Snakes curriculum <http://www.wagouldleague.com.au/index.htm>