



# TURTLE WARRIORS PROGRAM ONE

<b>CURRICULUM LEARNING AREA</b>		<b>CURRICULUM INTEGRATION</b>				
<b>Society &amp; Environment:</b> Investigation Communication & Participation <b>Society &amp; Environment:</b> Active Citizenship		<b>English:</b> Reading   Writing   Viewing   Speaking & Listening <b>Mathematics:</b> Number   Measurement   Chance & Data <b>Science:</b> Life & Living				<b>DEVELOPED BY</b> <b>Stephen Davis</b> – Excelsior PS May 2009
<b>PROGRAM OBJECTIVE</b>	This program introduces students to the Oblong Turtles that habitat the lake and wetlands located close to the school. In addition, the program fosters the idea of Active Citizenship in the students within the school and the wider community. The program achieves this by introducing and developing an understanding of the role of environmental activism for the sustainability of the world's ecosystems and the need to form action groups in order to achieve required outcomes.					
<b>CURRICULUM FRAMEWORK OVERARCHING LEARNING OUTCOMES</b>	Students use language to understand, develop and communicate ideas and information and interact with others.	Students recognise when and what information is needed, locate and obtain it from a range of sources and evaluate, use and share it with others.	Students select, use and adapt technologies.	Students describe and reason about patterns, structures and relationships in order to understand, interpret, justify and make predictions.	Students visualise consequences, think laterally, recognise opportunity and potential and are prepared to test options.	
<b>CURRICULUM FRAMEWORK VALUES</b>	Students understand and appreciate the physical, biological and technological world and have the knowledge, skills and values to make decisions in relation to it.	Students understand their cultural, geographic and historical contexts and have the knowledge, skills and values necessary for active participation in life in Australia.	Students interact with people and cultures other than their own and are equipped to contribute to the global community.	Students are self motivated and confident in their approach to learning and are able to work individually and collaboratively.	Students recognise that everyone has the right to feel valued and be safe, and, in this regard, understand their rights and obligations and behave responsibly.	
<b>CURRICULUM FRAMEWORK VALUES</b>	A pursuit of knowledge and a commitment to achievement of potential.	Self acceptance and self respect	Respect and concern for others and their rights	Social and civic responsibility	Environmental responsibility	
<b>WESTERN AUSTRALIA K – 10 SYLLABUS STATEMENTS OF LEARNING</b>	<b>ICP</b> <b>Students will be able to...</b> <ul style="list-style-type: none"> <li>Identify what aspects need to be considered when planning an investigation (for example, where to find information).</li> <li>Devise own questions when planning an investigation.</li> <li>Use simple data gathering techniques when collecting information when conducting investigations.</li> <li>Identify and use information from more than one source when conducting investigation.</li> <li>Select and compare relevant, literal and factual information when processing and interpreting the information.</li> <li>Make inferences from the information when processing and interpreting the information.</li> <li>Compare own interpretations with others when applying and communicating findings.</li> <li>Justify personal decisions when applying and communicating findings.</li> </ul>		<b>ACTIVE CITIZENSHIP</b> <b>Students will be able to...</b> <ul style="list-style-type: none"> <li>Understand and demonstrate why there is a need to develop and implement a program that protects the Long Necked Turtles that live in the man made and natural water catchments in their local community.</li> <li>Demonstrate a broader awareness for the need to protect and ensure the sustainability of wild animals on a global scale.</li> <li>Understand what factors may influence the survival of the Long Necked Turtle.</li> <li>Make connections between the influencing factors that are affecting the ecological balance of the natural world.</li> <li>Understand the role of an environmental activist in our society.</li> <li>Understand that individually they can be an environmental activist rather than a passive bystander.</li> </ul>			

**Tasks to demonstrate evidence of student learning will be...**

- **1:4:P:C:R** (Students to work together to identify what aspects need to be considered before undertaking investigative research).
- **Consequences and Sequels** (Students to be provided with questions regarding the ecological balances and students to decide on the consequences).
- **5W's & 1H** (Students to have the opportunity to devise own questions to help guide investigative research).
- **Cornell Note Taker** (Students record key words and phrases obtained from the variety of sources they referred to when undertaking the investigative research).
- **Word Hunter** (Students to write down words and phrases as the information is found during the research. The students then sort these words into common ideas or discard irrelevant words).
- **Jigsaw** (Students to analyse different aspects from a single text on "Turtles". Students use reading strategies such as 'Paraphrasing and Summarising' when analysing the text in order to compare and infer).
- **Written Report** (Students to write a report in order to interpret and infer the information they gathered during the investigative research).
- **Triad Listening** (Students to communicate findings to others providing opportunity to compare findings and justify personal decisions).

**Tasks to demonstrate evidence of student learning will be...**

- **TWLH Chart** (Students to record what they know about 'activism' or 'take action').
- **Brainstorm** (Students to think of reasons why there is a need to develop a program in the school to protect the Oblong Turtles. From this activity, guide discussion to more global scale awareness).
- **Graffiti** (Students think about and write down any factors that may affect the sustainability of Oblong Turtles. Aspects may include: water quality and monitoring, breeding opportunities, human impacts such as development, pollution and pets, natural and unnatural predators and the rehabilitation and ongoing care of injured turtles. Students use this information to help devise their own questions later in the unit when writing their reports).
- **Card Shuffle** (Students to match well known global activist organisations with a description of their work. For example, Green Peace, Save the Animals, Bears in China, etc).
- **Consider All Factors** (Students consider the consequences for the Oblong Turtles if there were no policy in place for their protection. Students consider the consequences if there were not activists in our global community).
- **Turtle Journal** (Students will keep a visual and literacy record of all work related to this unit of work. The journal will be used to write down and draw observations, record reflections and set goals. Students will use the journal to make predictions, explore new or alternative ideas and to analyse and evaluate new knowledge).

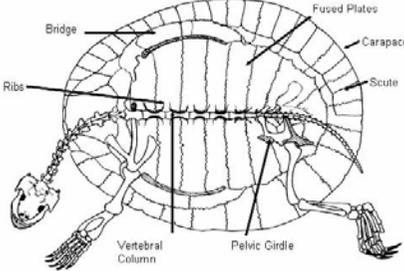
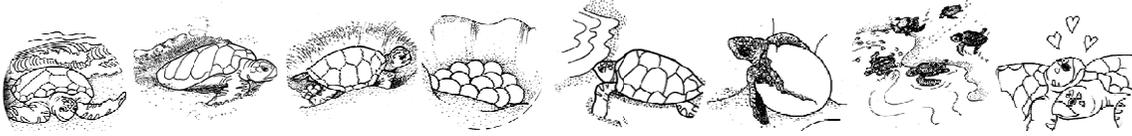
**Criteria for the task**

ICP: PLANNING			
Level 2	Given a focus question, identifies a range of aspects to be considered.	Is able to identify where to find relevant information	
Level 3	Demonstrates individual brainstorming	With guidance, plans an investigation by devising questions	
ICP: CONDUCTING			
Level 2	Uses subject keywords to search for resources	Identifies and records relevant information using reports or recounts	Makes literal factual observations
Level 3	Gathers information from more than one source. (reference, talk, excursion)	Records useful information in different ways (table, concept map, lists)	
ICP: PROCESSING & TRANSLATING			
Level 2	Sorts information into correct sequence and clusters ideas	Uses keywords to gather information.	
Level 3	Recognises key ideas and patterns	Discards irrelevant information	Makes inferences from the information
ICP: APPLYING & COMMUNICATING FINDINGS			
Level 2	Listens to others and compares own interpretation with others	Reflects on their own performance	
Level 3	Communicates findings in a variety of forms to suit the audience	Identifies gaps in their information	Justifies decisions after reviewing original understandings

<b>ACCEPTABLE EVIDENCE</b>	<b>ACTIVE CITIZENSHIP (ECOLOGICAL SUSTAINABILITY)</b>						
	<b>Developing Phase</b>	Demonstrates an understanding for the need to develop a policy that protects the Long Necked Turtles in local community.	Identifies what factors influence the sustainability of The Long Necked turtle in local community.	Demonstrates an understanding of the role activism plays in our society and can recall major activist organisations.			
	<b>Well Developed Phase</b>	Demonstrates an understanding for the need to protect the ecological balance of the natural world on a global scale.	Is able to make connections between influencing factors that affect the ecological balance of the natural world.	Can identify ways where individually they are able to actively change or take action to protect the ecological balance of the natural world.			
<b>Format for collecting and recording information</b>							
	Checklists	Anecdotal Observations	Collection of Work Samples	Student Self Assessment	Peer Assessment		
<b>TEACHING AND LEARNING EXPERIENCES</b>	<b>Principles of learning and teaching</b>						
	Opportunity to Learn	Connection & Challenge	Action & Reflection	Motivation & Purpose	Inclusivity & Difference	Independence & Collaboration	Supportive Environment
	<b>'Five E' Model</b> <b>ENGAGE</b> Mentally engage students, capture interest, able to express what they know.	<b>Teaching and Learning Activities</b> <b>INTRODUCTION</b> Hand out exercise books for students to use as their Turtle Journals. Explain to students that all work that concerns this unit will be done in this Journal  <b>TAKING ACTION</b> Discuss what the terms 'Activism' or 'Taking Action' means.  Provide a number of different logos of world and local organisations that are 'action groups'. Students to sort and classify into groups for the purpose of discussion.  Shape discussion around what each organisation does and whether it is a global or local organisation.  Classify logos under these headings: POLITICAL, ENVIRONMENTAL, HUMAN RIGHTS, ANIMAL RIGHTS. Talk about what these classifications mean and what this type of organisation typically does.  <b>TWLH Chart</b> Students to complete 'What I think I know' on their TWLH charts.				<b>Resources</b> Turtle Journals Turtle Journal covers  A variety of action group organisation logos laminated.  TWLH charts.	

<p><b>EXPLORE</b> Hands on activities, explore the concept or skill. Make sense of concept or skill.</p>	<p><b>TURTLE WARRIORS</b> Discuss with students how they will take on the role of Turtle Warriors in the school to protect and handle the Oblong Turtle. Introduce the concept that will take place as an Action Group within a school.</p> <p><b>Brainstorm/Discussion</b> What does an Action Group do? What does this mean for us? What consideration do we need to think of to <b>form</b> and <b>participate</b> in an Action Group?</p> <p><b>Consider All Factors (CAF)</b> Students to individually complete a CAF flow chart using the following reflective questions.</p> <ul style="list-style-type: none"> <li>• What would be the consequences if there was no policy in place to protect local wildlife.</li> <li>• What would be the consequences of me taking action to protect the Long Necked Turtles.</li> </ul> <p>Share with class.</p> <p><b>INFLUENCING FACTORS</b> Students will now consider what influencing factors affect the sustainability of Oblong Turtles in their local community. The term 'sustainability' will be introduced into class discussions.</p> <p><b>Think Pair Share</b> <i>What is sustainability?</i> Students work together to come up with a common understanding of what 'sustainability' means. Ideas and opinions are noted in Turtle Journal. After whole class discussion and a definition has been agreed upon, students to write this in their Turtle Journals.</p> <p><b>Graffiti Boards</b> <i>What are the influencing factors?</i> Students to think about any factors they can think of that may affect the sustainability of the Oblong Turtles.</p> <p><b>BIODIVERSITY</b> Introduce topic of biodiversity.</p> <p><b>Explanation</b> (Primary Connections 'Marvellous micro-organisms – Biodiversity mini unit' DETWA 2008) The earth supports a huge variety of plants, fungi, animals and micro-organisms. Organisms are found living over the surface of the land, in soils and in fresh and salt waters. Some micro-organisms can grow in the air, some on rocks and some in ice.</p> <p>Biodiversity is the variety of all living things. It includes the obvious large animals and plants, the smaller animals and creatures and millions of micro-organisms.</p>	<p>Turtle Journals</p> <p>Brainstorm</p> <p>Turtle Journals</p> <p>Word Wall</p> <p>Graffiti Boards</p> <p>Turtle Journals</p> <p>Word Wall</p>
--	--	---

'Five E' Model	Teaching and Learning Activities	Resources																						
	<p>Biodiversity describes more than the gross number of kinds of living things. It includes:</p> <ul style="list-style-type: none"> <li>• Species diversity</li> <li>• Genetic diversity</li> <li>• Ecosystem diversity</li> </ul> <p>Discuss with students what these terms mean. Some students to look up on internet, whilst other look for information in encyclopaedias and dictionaries.</p> <p><b>Bug Dial</b> Students to complete bug dial prior to excursion. This will be used at excursion to identify macro invertebrates.</p> <p><b>Water Quality Jigsaw</b> Students to work in cooperative groups to learn about what factors contribute to water quality. This information is shared back to other groups</p> <p><b>Anticipation Guide</b> Prior to attending the excursion, the students will complete an Anticipation Guide questionnaire. This will tune in students and provide a way for students to know what information they should anticipate or learn at the excursion.</p> <table border="1"> <thead> <tr> <th>Anticipation Statement</th> <th>True/False</th> </tr> </thead> <tbody> <tr> <td>The Canning River was once used to water fruit trees.</td> <td></td> </tr> <tr> <td>One side of the Kent Street Weir is less salty than the other.</td> <td></td> </tr> <tr> <td>There is a species of shrimp in the Canning River.</td> <td></td> </tr> <tr> <td>The Canning River can be considered as an Eco System.</td> <td></td> </tr> <tr> <td>There are small crocodiles, rarely seen, that can be found in the Canning River.</td> <td></td> </tr> <tr> <td>The river changes height at different times of the day.</td> <td></td> </tr> <tr> <td>The level of salt in water has an affect on what organisms can survive in the water.</td> <td></td> </tr> <tr> <td>The ducks with orange bills are vicious and will snap at your heels when you turn your back on them.</td> <td></td> </tr> <tr> <td>Sharks can be found in the river.</td> <td></td> </tr> <tr> <td>All algae in the river is dangerous and will make you sick if you swallow it.</td> <td></td> </tr> </tbody> </table> <p><b>Excursion to the Canning Regional Eco Education Centre (CREEC)</b> Students will participate in two workshops that focus on the biodiversity of a body of water (Canning River). The two workshops will include Water quality testing and Micro-invertebrates. This session will also include a follow up by the Education Officer from CREEC to the schools local lake and wetlands later in the unit.</p>	Anticipation Statement	True/False	The Canning River was once used to water fruit trees.		One side of the Kent Street Weir is less salty than the other.		There is a species of shrimp in the Canning River.		The Canning River can be considered as an Eco System.		There are small crocodiles, rarely seen, that can be found in the Canning River.		The river changes height at different times of the day.		The level of salt in water has an affect on what organisms can survive in the water.		The ducks with orange bills are vicious and will snap at your heels when you turn your back on them.		Sharks can be found in the river.		All algae in the river is dangerous and will make you sick if you swallow it.		<p>Turtle Journals</p> <p>Word Wall</p> <p>Ribbons of Blue Bug Dial resource sheet</p> <p>Ribbons of Blue Water Quality information sheets</p> <p>Anticipation Guide</p> <p>Resources supplied by CREEC.</p>
Anticipation Statement	True/False																							
The Canning River was once used to water fruit trees.																								
One side of the Kent Street Weir is less salty than the other.																								
There is a species of shrimp in the Canning River.																								
The Canning River can be considered as an Eco System.																								
There are small crocodiles, rarely seen, that can be found in the Canning River.																								
The river changes height at different times of the day.																								
The level of salt in water has an affect on what organisms can survive in the water.																								
The ducks with orange bills are vicious and will snap at your heels when you turn your back on them.																								
Sharks can be found in the river.																								
All algae in the river is dangerous and will make you sick if you swallow it.																								

'Five E' Model	Teaching and Learning Activities	Resources
<p><b>EXPLAIN</b>                      Explanations are made on the concept or skill. Explanation follows experience.</p>	<p><b>THE OBLONG TURTLE</b>                      Students will focus on the Oblong Turtle for the purpose of gaining an understanding of the reptile in terms of its anatomy, lifecycle, habitat and where it fits into the ecosystem.</p> <p>Scientific name: <i>Chelodina oblonga</i>                      Nyoongar name: Booyi</p> <p><b>Anatomy</b>                      Students to learn the names of the different parts of the turtle shell. Students will match labels to a turtle skeleton diagram.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p><b>Life Cycle</b>                      Students to put pictures of the lifecycle in the order they think it should go.</p> <div style="display: flex; justify-content: center; align-items: center;">  </div> <p>Discuss each picture and put enlarged whole class copy into order. Students to check own and change. Glue into Turtle Journals.</p>	<p>Turtle Journals</p> <p>Word Wall</p> <p>Skeleton and Scutes diagram</p> <p>Enlarged copy of photographs for each group</p> <p>Life Cycle pictures (One enlarged copy for whole class discussion)</p> <p>Turtle Journals</p>

'Five E' Model	Teaching and Learning Activities	Resources
<p><b>ELABORATE</b> Provides opportunity for apply the concepts or skill. Develops a deeper understanding of the concept or skill.</p>	<p><b>THE OBLONG TURTLE POLICY</b> Refer students back to 'Explore' lessons on the need for a policy to ensure the sustainability of the Oblong Turtle. Student to re look at their initial CAF and decide if there is anything else they can add to this.</p> <p><b>Becoming an Activist</b> With the assistance of Amy Krupa (SERCUL) students will participate in writing a 'Kid Friendly' policy that will ensure the protection and sustainability of the Oblong Turtles found in the school and local wetlands.</p> <p>Students to think about and prepare an 'aim' or focus for the Action Group.</p> <p>Students to prepare visual aids and present these to other students.</p> <p>Students to prepare a Turtle Warrior kit necessary for the safe handling of the reptiles.</p> <p>Students to think about ways to be visible to other students whilst in the playground. For example, a logo that could be printed on badges, caps or shirts. This logo will become the Action Groups branding.</p> <p><b>Environmental Issues</b> Carry out a whole class brainstorm to discuss the Environmental Issues that would affect the Oblong Turtle. Guide discussion around POLLUTION AND WATER QUALITY, DEVELOPMENT and ENVIRONMENTAL ISSUES. Students to visit local lake to carry out a macro-invertebrate count.</p> <p><b>1:4:P:C:R</b> Students to work together to identify what aspects need to be considered before undertaking investigative research.</p> <p><b>REFER TO TURTLE INFORMATION REPORT TEACHING PROGRAM</b></p> <p><b>ICP: PLANNING</b> <b>5W's &amp; 1H</b> Students to have the opportunity to devise own questions to help guide investigative research. Provide assistance to students who are having difficulty to devise own questions.</p> <p><b>ICP: CONDUCTING</b> <b>Cornell Note Taker</b> Students record key words and phrases obtained from the variety of sources they referred to when undertaking the investigative research. Students will be encouraged to use information already found and will be directed to a number of age appropriate websites.</p> <p><b>Jigsaw</b> Students to analyse different aspects from a single text on "Turtles". Students use reading strategies such as 'Paraphrasing and Summarising' when analysing the text in order to compare and infer.</p>	<p>Turtle Journals</p> <p>Word Wall</p> <p>Dept. Environment &amp; Conversation Fauna Note 37</p> <p><a href="http://www.pilbarapythons.com/oblongturtle.htm">http://www.pilbarapythons.com/oblongturtle.htm</a></p> <p>Dept. Environment &amp; Conversation Fauna Note 37</p>

<b>TEACHING AND LEARNING EXPERIENCES</b>	<b>'Five E' Model</b>	<b>Teaching and Learning Activities</b>	<b>Resources</b>
		<p><b>ICP: PROCESSING &amp; TRANSLATING</b></p> <p><b>Word Hunter &amp; Sorter</b> Students to write down words and phrases as the information is found during the research. The students then sort these words into common ideas or discard irrelevant words).</p>	
	<p><b>EVALUATE</b> Continue the development of the understanding of the skill and evaluate their learning.</p>	<p><b>Written Report</b> Students to write a report in order to interpret and infer the information they gathered during the investigative research. The final report must include the topics: DESCRIPTION, DIET, HABITAT, LIFE CYCLE and an ENVIRONMENTAL ISSUES affecting the Oblong Turtle.</p> <p><b>ICP: APPLYING &amp; COMMUNICATING FINDINGS</b></p> <p><b>Triad Listening</b> Students to communicate findings to others providing <i>opportunity</i> to compare findings and justify personal decisions.</p> <p><b>Ongoing Turtle Warrior work</b> Students to continue to actively participate in the sustainability of the Oblong Turtles. Students will be encouraged to perform ongoing evaluations of the policy and adjust accordingly.</p> <p><b>TWLH Chart</b> Students to reflect on and complete their TWLH Chart that was started at the beginning of the unit about 'Taking Action'.</p>	<p>Writing a Turtle Report Teaching &amp; Learning Program</p> <p>Turtle Journals</p> <p>Triad Listening Assessments sheets</p> <p>TWLH charts</p>

Students continually monitor turtles as the year progresses. This information is updated on the website graph.