

Conservation Warriors for Year 7

Students in Year 7 STEM have applied the Design Thinking Process to become 'Conservation Warriors'; designing, creating and implementing a website media campaign to raise awareness of an endangered animal. Students were presented with the driving question, *How do we raise awareness to reduce issues impacting endangered animals?* and were challenged to solve the problem by formulating a campaign that targets the significant threats to their animal. In groups, students launched their campaign through a website, where computational thinking processes were applied through HTML coding.

In addition, students were required to maintain a collaborative journal to document their goals for each lesson, track their progress and meet task deadlines and requirements.

Science outcomes	SC4-VA2	SC4-VA3	SC4-LW14
Mathematics outcomes	MA4-20SP		
TAS outcomes	4.1.2	4.6.2	

Statement of impact

The project extended student's understanding of and appreciation for computational thinking. It challenged them to consider the role of html coding as a key component to building their website.

In a authentic and complimentary manner, students were reminded of the importance of the human footprint on global fauna. It raised awareness of their responsibilities to sustaining wildlife and the role they can play in having a positive impact.

For more information

Joel Budd | St Ignatius' College

E jbudd@riverview.nsw.edu.au



THE UNIVERSITY OF
SYDNEY



Saint Ignatius' College
RIVERVIEW

Year 7 Magis Integrated

UNIT: CONSERVATION WARRIORS

STAGE 4

DURATION: 16 LESSONS

Driving Question: How can we, as Year 7 students, raise awareness to reduce issues impacting endangered animals?	Essential Questions: What is an endangered species? What makes an animal endangered? What classifies animals as endangered? What human activities have contributed to endangering species? What are humans doing currently to reduce impact on endangered animals? How can humans help endangered animals? How effective are these interventions? What organisations are set up to reduce the number of endangered animals? How reliable is the data being provided to the community on endangered animals? Will endangered animals survive without human intervention? What are the issues impacting endangered species?
Unit Context:	
Education is the key to conservation.	
Syllabus Outcomes and Content:	
Maths Outcomes MA4-20SP: analyses single sets of data using measures of location, and range	

Science Outcomes

SC4-VA2: shows a willingness to engage in finding solutions to science-related personal, social and global issues, including shaping sustainable futures

SC4-VA3: demonstrates confidence in making reasoned, evidence-based decisions about the current and future use and influence of science and technology, including ethical considerations

SC4-LW14: relates the structure and function of living things to their classification, survival and reproduction

Technology Outcomes

4.1.2 - describes factors influencing design in the areas of study of Built Environments, Products, and Information and Communications

4.6.2 - identifies and explains ethical, social, environmental and sustainability considerations related to design projects

Learning Across the Curriculum

Ethical Understanding - *Ethical Digital Citizenship* - Ethics and related law, codes of practice, follow social and ethical protocols and understand the need to protect data and intellectual property

Creative and Critical Thinking - students learn to generate and evaluate knowledge, clarify concepts and ideas, seek possibilities, consider alternatives and solve problems

ICT Capability - used effectively and appropriately to access, create and communicate information and ideas, solve problems and work collaboratively.

Assessment for/as/of Learning:

Design and build an awareness strategy for an endangered animal

Individual

Collaboration and communication

[Student Ignatian Pedagogy](#) Exercise

Journal - self and peer evaluation

Group

Website design and functionality

Campaign/Strategy - effectiveness in raising awareness

Outcome	Week/ Date				Teaching and Learning Activities	T&L Adjustments	Resources	Responsibilities	Suggestions, Improvements, Feedback	Registration
	A- June 14 T2W8 June 19 T2W9	B - June 14 -15 T2W	C - June 14 T2W7 June 19 T2W8	D - June 14 T2W7	Lesson 1 Owl Presentation - 7C OR Clean Up Vessel 7A, 7B, 7D Watch 'Blue' and complete pre zoo booklet; **zoo booklet pre-activities will needed to be completed for HW by those classes who do not have a lesson before the excursion - teachers to structure to suit their	Visuals	Lesson plan PowerPoint			

					line**					
ZOO EXCURSION - June 20										
	A- Aug 6	B - June 28 T2W 9	C - June 26 T2W8	D - June 21 T2W9	Lesson 2 Post-zoo lesson Recap task Choose groups Choose animal	Scaffolds and Leading questions have been provided for any student with profile	Lesson Plan	A - Toby B+C - Sam Oliver D - Kim Davey		
	A- Aug 6 T3W3	B - July 26 T3W 1	C - June 28 T2W9	D - June 28 T3W1	Lesson 3 What makes a good campaign? Canvas	Scaffold of unpacking analysing a good campaign	Lesson Plan	A - B+C -Sam D -		
	A- Aug 14 T3W3	B- July 27 T3W 1	C - July 26 T2W9	D - July 26 T3W2	Lesson 4- Introduction to google sites and web design		Lesson Plan	A - B+C - D -		
	A- Aug 20 T3W4	B - Aug 1 T3W 2	C - Aug 7 T3W1	D - Aug 1 T3W2	Lesson 5 - web design using paper and pencils		Lesson Plan	A - B+C - D -		
	A- Aug 20	B - Aug	C - Aug 9	D - Aug 2	Lesson 6- web design and begin	HTML Activity - (Blocks) Already	Lesson Plan	A - B+C -		

	T3W5	9 T3W 3	T3W3	T3W3	research	created. Located in plastic containers. This then moves into using Google Sites HTML functionality. Please ensure students work with Google Sites Classic		D -		
	A- Aug 28 T3W5	B - Aug 10 T3W3	C- Aug 14 T3W3	D - Aug 15 T3W3	Lesson 7 - Classifications - add to webpage		Lesson Plan	A - B+C - D -		
	A- Sept 3 T3W6	B - Aug 15 T3W4	C- Aug 21 T3W4	D - Aug 16 T3W4	Lesson 8- Research of animal; overview and threats - add to website and develop a campaign. *Reminder that students need to apply their understanding of their animal to develop a campaign that will be launched through their website**		Lesson Plan	A - B+C - D -		

	A- Sept 3 T3W7	B - Aug 23 T3W 5 Do AUG 29	C- Aug 28	D - Aug 16T3 W4	<u>Lesson 9-</u> Understanding data and statistics - apply to research of the animal and use to develop campaign D- website design		Lesson Plan			
	Sept 11	Aug 29 SEP 6	C- Sept 4	D - Aug 23 T3W5	<u>Lesson 10</u> Understanding data and statistics (2)- apply to animal research Time to continue to develop website and campaign from previous lessons		Lesson Plan			
	Sept 17 Unders tanding data 3	Sept 6	Sept 6	D - Aug 23T3 W5	<u>Lesson 11 -</u> Understanding data and statistics -(3) D- classification					
	Sept 17	Sept 7	Sept 11	D - Aug 30	<u>Lesson 12</u> website design/campaign					

				T3W5	development D- Maths					
	Sept 25	Sept 12	Sept 18	Sept 6	<u>Lesson 13</u> website design/campaign development D- maths					
	Oct 23	Sep 20	Sept 20	Sept 12	<u>Lesson 14</u> website design/campaign development D Maths					
Year 7 Assess. block		Sep 21		Sept 13	<u>Lesson 15</u> website design/campaign development					
	6 Nov	Sep 26th	Sept 25	Sept 26	<u>Lesson 16</u> EXPO					
Evaluation:										

Unit Evaluation

For each question place your initials in the column that you feel best represents your opinion. If you wish to provide further details please place your name in brackets at the end of your comment.

Teacher	Agree	Neutral	Disagree	Additional Comments
1. The program includes a clear rationale				
2. I felt that I had a clear understanding of the goals and aims of this program				
3. This program enabled me to produce opportunities for differentiation in order to pitch it appropriately				
4. The resources listed in the program were available and appropriate				
5. This program allowed opportunities for students to direct their own learning				
6. The sequence of learning activities in this program was appropriate				
7. The suggested assessment strategies in this program were				

effective				
8. The program included Assessment For (formative/ongoing), As (peer/self reflection) of (high stakes) Learning				
10. The program included a good range of suggested learning activities.				
11. The students enjoyed this topic				
12. The students engaged well with the program content				
What activities were successful?				
What activities were unsuccessful?				
Thoughts on the timing of delivery of the program?				
Adequacy of resources?				

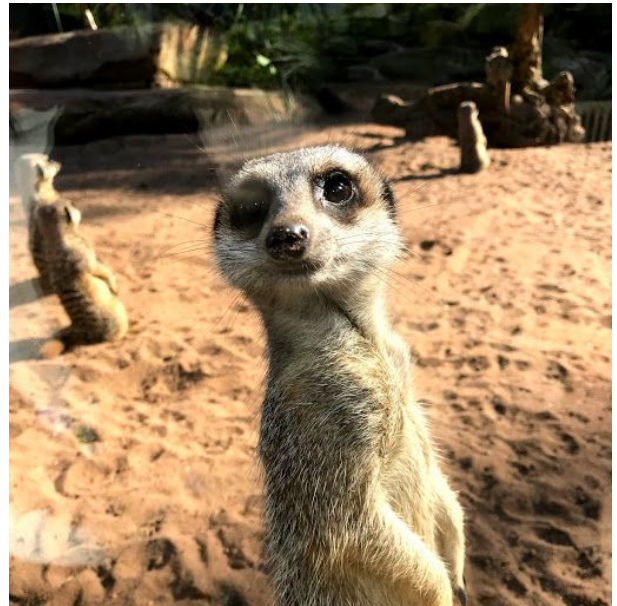
Recommendations for change?

NAME: _____

GROUP: _____

Saint Ignatius' College, Riverview

Year 7 STEM Magis Integrated Learning Program 2018



Conservation Warriors Zoo Booklet

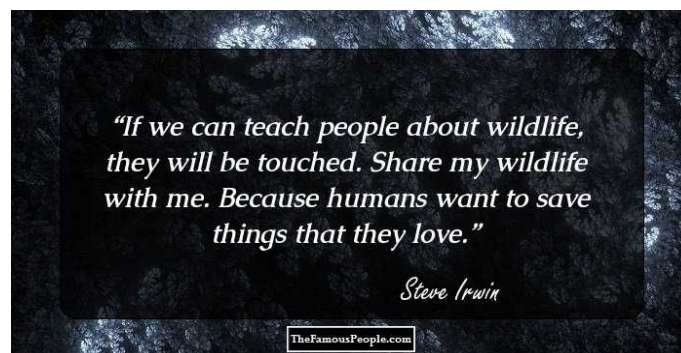
Why are we going to the Zoo?

Design Situation

Human impacts on the natural environment have caused issues within the animal kingdom. The exposure to documentaries such as Blue, have emotionally targeted people to act and preserve our natural community.

Design Brief

In groups of three, you are to design and create an organisation and implement a **media campaign** (with the use of a website) that raises awareness of an endangered animal that targets a specific group i.e. 10 - 14 year olds (Generation Z).



When you connect to animals, see them, hear about them and learn about them, you are more inclined to help them.

Part of your trip to the zoo is to learn about different animals and the ways in which the zoo engages you in their plight.

View the following campaigns and analyse how they aim to help the animal it is connected too.

- Litter Free Oceans
- The Seal Show
- The Sumatran Tigers
- Tasmanian Devil
- Western Lowland Gorilla

Before You Go



1: Go to: <https://taronga.org.au/litter-free-oceans/>

2: Read Andrew the sea turtles story and answer the following questions.

a. What species of turtle is Andrew?

b. Why did Andrew end up washed up on the beach?

3: Click on 'Calculate your impact' and fill in your results bellow:

			
0	0	0	0
Takaway Cups	Plastic Bottles	Plastic Straws	Takeaway Containers

4: Which item do you waste most every year?

5: Click on this item and **summarise** its impact on the environment.



6: How could you, personally, reduce your use of this item

7: Consider how successful the campaign “Litter Free Oceans” is at *reducing litter in the ocean* and complete the PMI chart below

Plus <i>What were the good things about the campaign?</i>	Minus <i>What needed improving? How could they have done a better job?</i>	Interesting <i>What were some 'cool' things about the campaign? E.g what got your attention?</i>
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At The Zoo



The Seal Show



1. How does the Seal Show aim to help seals in the wild?

2. List the **effective strategies** in this seal show to raise awareness for their cause?

3. What did you learn about this issue after viewing this campaign?

4. Complete the PMI chart below:

Positives	Minus	Interesting

The Sumatran Tigers



1. What is the main focus of the campaign?

2. List the **effective strategies** in this campaign to raise awareness for their cause?

3. What did you learn about this issue after viewing this campaign?

Positives	Minus	Interesting

Tasmanian Devil



1. What is the main focus of the campaign?

2. List the **effective strategies** this campaign uses in raising awareness for their cause?

3. What did you learn about this issue after viewing this campaign?

Positives	Minus	Interesting

Western Lowland Gorilla



1. What is the main focus of the campaign?

2. List the **effective strategies** this campaign uses in **raising awareness** for their cause?

3. What did you learn about this issue after viewing this campaign?

Positives	Minus	Interesting

When You Get Back From the Zoo

Choose **ONE** of the campaigns from the zoo that impacted you the most and answer the following questions:

1. How does this campaign **affect** your choices and behaviour in the future?

2. To what extent does this campaign make you want to do something different? What would you do different and why?

Now consider **ALL** of the campaigns you viewed at the zoo:

3. Describe the **most effective strategy** used in the campaigns at the zoo?

Notes: