

懷生國小 海洋教育雙語教案、體驗活動規劃


教學領域：綜合活動		本單元共 18 節，本堂為第 14 節		
單元名稱	Endangered Animals- HIPPO Effect	融入學科領域	自然、社會	
教材來源	自編、網路資源、雜誌	教案設計者	李真儀	
實施年級	高年級	授課時間	共 1 節，40 分鐘	
教學設計理念	<p>前<u>桃子腳</u>校長 <u>李惠銘</u>曾說：「越在地化，越國際化！」。真正能讓我們孩子走向國際的，是讓他們更了解自己土地上的人、事、物，讓我們有能力把臺灣在地故事分享到世界各地。</p> <p>在我們日常生活中，報章雜誌、新聞常見的吉祥物「熊讚」時常出席各大活動，但我們的孩子是否清楚國寶級「臺灣黑熊」正面臨瀕臨絕種的危機。從此主題更進一步認識國際環境議題-HIPPO Effect 河馬效應。此外，在臺灣，不只臺灣黑熊備受河馬效應的威脅、其他保育類特有種動物也正和臺灣黑熊一樣面臨瀕臨絕種的生存挑戰。</p> <p>近年，全球環保意識高漲，臺灣也不落人後，積極推廣保育。透過本課程，孩子們將了解到，不論是在地保育類動物，或是世界各地的珍貴、稀有物種，皆受到人類棲地過度開發及環境污染……等迫害，而數量急遽減少。本課程帶學生一窺國際環境議題、環保議題，以及身為世界公民的我們能採取什麼樣的行動，讓動物瀕危的情形減緩，更讓人類與動物、大自然能和平共存。</p> <p>在跨社會、自然、英語等眾多領域及環境重大議題的雙語綜合活動課程中，我們讓孩子沉浸於趣味的雙語國際教育課程環境中，更賦予雙語課程接軌國際的意義，讓語言成為學生生活的一部分，發揮雙語教育的目的。</p>			
學生先備知識	<p>學科：</p> <ol style="list-style-type: none"> 1. 社會-已能說出臺灣九座國家公園地理位置。 2. 自然-已能理解棲息地、外來物種等名詞；已能說出部分臺灣保育類特有種。 3. 國語-已於五年級第二課「看見臺灣」中，學到臺灣自然生態的美麗與開發帶來的汙染哀愁。 <p>語言：</p> <ol style="list-style-type: none"> 1. 能說出基礎動物英文，如 bear, cat, dolphin 2. 能聽懂問句：What's this? / What's that? 3. 能以 Yes/ No 表達意見、回答老師的問題。 			
綜合活動能力指標	主題軸	核心素養	各階段能力指標	各項細目
	保護自我與環境	危機辨識與處理	4-3-1 探討周遭環境或人為的潛藏危機，運用各項資源或策略化解危	4-3-1-1 透過各種觀察與體驗活動，探索周遭環境的潛藏危機。 4-3-1-2 探討各項可能資源，並尋求可用的資源來化解周遭環境的潛藏危機。

		險。	4-3-1-3 透過問題與討論，擬定可用的策略解決周遭環境的危機。
學科單元 學習目標	<ol style="list-style-type: none"> 1. 學生能說出河馬效應環境議題中導致動物瀕危的五個原因。 2. 學生能說出臺灣的國家公園及了解其地理位置。 3. 學生能說出臺灣的保育類動物名稱以及其棲息地位置。 4. 學生能理解臺灣的土地利用開發與環境永續發展與動物保育這三者的關係。 5. 學生能參與小組活動與討論。 		
語言 學習目標	<i>Language of learning</i>		
	<ol style="list-style-type: none"> 1. Target vocabularies: endangered, extinct, HIPPO, habitat loss, invasive species, pollution, population growth, over-consuming, Formosan, eco-living 2. Target sentence pattern 1: Q: Are _____ endangered? A: Yes, they are./ No, they are not. 3. Target sentence pattern 2: Q: Where is _____'s habitat? A: _____'s habitat is in _____ national Park. 		
	<i>Language for learning (language skills)</i>		
	<ol style="list-style-type: none"> 1. Conservation animal names: black bear, leopard cat, white dolphin, broad-tailed butterfly, clouded leopard, sika deer, Taiwan salmon, orange-bellied tree frog, Taipei ground snake, Taiwan blue magpie, 2. 9 National Parks: Yang-Ming-Shan National Park, She-Pa National Park, Yu-Shan National Park, Taroko National Park, Ken-Ting National Park, Peng-hu National Park, Dong-Sha National Parks, Tai-Jian National Park, Kin-Men National Park 3. Verb phrases for task: Get up. / Get down. / Pull. / Loosen. /We made it. / We failed 		
	<i>Language through learning</i>		
<ol style="list-style-type: none"> 1. 當老師在說明汙染時，能延伸主題說出 air, water, noise, land 等相關重要汙染。 2. 當老師在說明外來種入侵時，學生舉出 apple snail, fire ant 等外來種案例。 3. 聽懂在學習過程中教師所使用的英文課室語言，並簡單以 Yes/ No 回應。 4. 聽懂在學習過程中，若遇到不懂的字彙或內容能以 “I don’t understand.” 或 “What does _____ mean?” 回應。 5. 小組任務合作時，學生能幫同儕加油打氣說出 “Go! Go!” “Pull!” “Loosen!” 			
中文 使用時機	For teacher	For students	
	<ol style="list-style-type: none"> 1、以英文呈現教學內容，但老師可用中文說明。 2、在解釋專有名詞時，可中英文並用。 	<ol style="list-style-type: none"> 1、學生可以中文提問、回答問題及進行討論。 2、若學生以中文回答，老師可將中文翻譯成英文寫在黑板上，並請學生寫下英文翻譯。 	
與其他領域/ 學科的連結	自然、社會、英語文		

議題融入 (無則免填)	<input type="checkbox"/> 性別平等教育 <input type="checkbox"/> 人權教育 <input checked="" type="checkbox"/> 環境教育 <input checked="" type="checkbox"/> 海洋教育 <input checked="" type="checkbox"/> 品德教育 <input checked="" type="checkbox"/> 生命教育 <input type="checkbox"/> 法治教育 <input type="checkbox"/> 科技教育 <input type="checkbox"/> 資訊教育 <input checked="" type="checkbox"/> 能源教育 <input type="checkbox"/> 安全教育 <input type="checkbox"/> 防災教育 <input type="checkbox"/> 家庭教育 <input type="checkbox"/> 生涯規劃教育 <input type="checkbox"/> 多元文化教育 <input type="checkbox"/> 閱讀素養 <input type="checkbox"/> 戶外教育 <input checked="" type="checkbox"/> 國際教育 <input type="checkbox"/> 原住民族教育		
學習情境與動機引發	1. 座位安排，全班分為三組，每組四到五人。 2. 課前思考一：播放 30 秒短片，先引導學生進入動物瀕危的情境。 3. 課前思考二：以三個問題為整堂課暖身，讓學生課前微思考，課後由學習內容統整出自己的答案。		
教學策略	1. Collaborative learning. 2. Question and Answer to enhance critical thinking.		
教學資源及器材	投影片、網路、投影機、臺灣地圖、國家公園地圖，保育類動物紙杯、細繩、橡皮筋、呼拉圈、		
教學流程			
教師	學生	時間	評量方式
Warm Up 1. Teacher plays the video of “An orangutan attacks a bulldozer destroying its forest” (30 sec). 2. After the video, Teacher shows three questions to the students and give them 5 minutes to discuss and find the answers through tech-aid together . Questions are also included ORID method: Q1: What's the animal in the video? Q2: Where is Borneo Island? Q3: What happened in the video? Q4:“How do you feel?” 3. After five minutes discussion, teacher passes down iPads and students start to do individual quiz to check students’ understanding after group discussion. 4. Teacher wraps up the warmup session by taking students to look at the	Warm Up 1. Students watch a video. 2. Students brainstorm and discuss with their groupmates according to the questions which teacher assigned. 3. After five minutes discussion, students start to do individual quiz on ONO platform to check their self-understanding after group discussion. 4. Students wrap up questions with teacher.	1” 5” 2” 3”	 口語回答 小組討論 個人閱讀評量 口說評量

<p>questions together.</p>			
<p>Task 1</p> <ol style="list-style-type: none"> 1. Teacher asks what does “<i>endangered</i>” mean? 2. Teacher asks “why are animals endangered?” 3. Teacher asks “what does the first letter “H” of HIPPO Effect stand for? Teacher shows habitat loss picture examples around the world and the local habitat loss problems in Taiwan. 4. Teacher asks “what does “I” in HIPPO Effect stand for?” 5. Teacher asks “what do the two Ps in HIPPO Effect’s HIPPO stand for?” 	<p>Task 1</p> <ol style="list-style-type: none"> 1. Students try to guess the meaning of “endangered” from seeing the picture of Formosan black bears getting fewer and fewer these recent hundred years. Students will be able to refer that the word “endangered” means the amount of the specific specie will be quickly extinct if we don’t protect them as soon as possible. 2. Students can answer question by using English or Chinese. 3. Students are able to answer “Habitat Loss” or “H stands for habitat loss.” Students will be able to simply explain the meaning of habitat loss. 4. Students are able to answer “Invasive species” and by using Chinese or English to simply explain the meaning of invasive species. Students are able to give two local examples of invasive species, such as apple snail and fire ants. 5. Students answer one of “P”’s means pollution and the other “P” means population growth. Higher achievers are able to say some different ways of pollutions. 	<p>2”</p> <p>2”</p> <p>2”</p> <p>2”</p> <p>2”</p> <p>2”</p>	<p>口語 回答</p> <p>口語 回答</p> <p>口語 回答</p> <p>口語 回答</p> <p>口語 回答</p> <p>口語 回答</p>

<p>6. Teacher asks “what does the last letter “O” in HIPPO mean?”</p>	<p>6. Students are able to say “Over-consuming or over-exploitation” to explain the last letter “O” of HIPPO.</p>		
<p>Task 2</p> <p>“Formosan Animal Warriors”</p> <p>1. Conservation animals review</p> <p>Teacher leads students to go to the back of classroom and circled around the paper cups. Each cup has a Formosan conservation animal picture on it which stands for the animal. Teacher asks what animal it is.</p> <p>2. Show barriers-HIPPO</p> <p>There are several boxes on the floor. Each box has a letter on it which are “H” “I” “P” “P” “O”. Teacher explains that Formosan animals are in danger because of being threatened by “HIPPO” problems. All the animals are placed far away from their habitats, so students’ mission is to rescue endangered animals back to their animals.</p> <p>3. Actions verbs and phrases review</p> <p>Teacher call a student to demonstrate actions together, such as “pull” “loosen” “get up” “get down” “lower your body” “pull harder” “We/they made it!” “We/they failed.” “Try again!”</p>	<p>Task 2</p> <p>“Formosan Animal Warriors”</p> <p>1. Students go to the back of classroom and try to answer teacher’s question of what Formosan animal it is on recycled paper cups as review. Students might answer “It’s a Formosan leopard cat/ Formosan black bear/ Taiwan white dolphin Formosan sika deer/ Taiwan Salmon/” .</p> <p>2. Students see boxes on the floor and will be able to tell and knows “H means habitat loss” “Invasive species” “Pollution” “Population” and “Over consuming” are barriers that blocks Formosan animals.</p> <p>3. Students review action verbs with the teacher.</p> <p>The followings are examples: <i>“pull” “loosen” “get up” “get down” “lower your body” “pull harder” “We/they made it!” “We/they failed.” “Try again!”</i></p>	<p>3”</p> <p>1”</p> <p>1”</p>	<p>口語 回答</p> <p>口語 回答</p> <p>口語 動作</p>

<p>4. Teacher briefly introduces game rules. When the first team come up, teacher will ask “What animal do they want to rescue?” If the team wants to rescue Formosan leopard cat, they have to know where the animal’s habitat is. If students answer correctly, they can start to rescue the animal. While one team is saving the animal, the others must cheer for the team and watch their saving process attentively.</p> <p>5. Starts warrior action</p> 	<p>4. Each team comes up to rescue animals and tries to bring it back to their habitat. Before they start the saving action, group members need to know where their target animal’s habitat is and answer correctly.</p> <p>5. Every group member hold the rope and try to pick up the cup by pulling and losing the rope. Their goal is to put the animal back to its’ habitat. Therefore, it will be able to survive from the threats of HIPPO.</p>	<p>3”</p> <p>7”</p>	<p>小組 合作</p> <p>口語 回答</p> <p>小組 合作</p>
<p>Wrap Up</p> <ol style="list-style-type: none"> 1. After saving animals, teacher asks why it is important to know where these endangered animals live. 2. Teacher asks students write down their thoughts towards the last two questions which were brought out in the beginning of the class. 	<p>Wrap Up</p> <ol style="list-style-type: none"> 1. Students try to do some brainstorming to answer teacher’s wrap-up questions. 2. Students take notes of the three questions and they can bring it home as homework. 	<p>3”</p>	<p>口語 回答</p>

*寒假進行戶外海洋教育體驗課程，體驗流程如下

微夢想海洋教育之一日討海人

時間：112 年 2 月 7 日

地點：基隆八斗子 八斗國小

學生人數：30 人（五、六年級生各半）

帶隊教師：3 人（衛生組長、高年級導師 2 人）

時間規劃	流程	活動內容
8:55	集合	地點：懷生國小穿堂 確認裝備：悠遊卡、雨衣、雨具、午餐、零錢
9:00	出發 搭乘 1579 客運	地點：忠孝復興站搭乘 1579 客運至八斗子站 車資：兒童 36 元/成人 72 元
10:00	基隆八斗國小	環境教育課程 1. 自製石花凍：在地取材自製低熱量營養點心 2. 灑漁網體驗 3. 海洋生態藻類認識 4. 海藻書籤 DIY
12:00	午餐	用餐地點：八斗國小 午餐自備 或 自備零錢至超商購買、享用上午自製石花凍
13:30	潮境公園	1. 八斗國小主任帶領進行八斗子漁村文化巡禮 2. 潮境公園歷史變遷背景實地探訪認識
14:30	海洋科技探索館	費用：免費 約 30 分鐘的停留 參觀休憩後搭乘客運 1579 返程台北
16:00	散會	地點：懷生國小穿堂 註：視交通狀況可能提早或晚抵達 10-15 分鐘，請見諒。