【附件2】:110年度海洋教育「保護海洋」教案設計格式

(一)基本資料

參加組別	■高中組□國中組□國小組□幼兒園組	編號	(由本中心需填寫)
參加子題	■我不傷害海洋□海洋不傷害我	א ובחב	陳映允
教案名稱	Sea the Life	設計者 姓名	黄湘鈞
教學領域 (或科目)	英文科	(至多3名)	鄧菩芳
教學理念	大部分的學生都有去過海邊嬉戲的經驗,大家為能保護我們的海洋,但大家不知道的是塑膠紙袋,減少地球上的樹木被濫伐,只不過這項初衷破壞。 我們想透過此教案讓學生以「塑膠袋」的角度洋的那些行為,用不一樣的觀點出發,激發保護沒	>>袋的發明初 定,最終卻造 を思考,以不	衷,其實是為了取代 成了自然生態環境的 同面向去看待破壞海

(二)教案概述

1. 高中、國中及國小組

教案名稱	Sea the Life		
實施年級	高一	節數	共 <u>4</u> 節, <u>200</u> 分鐘。 (請以1至4節課設計)
課程類型	■議題融入式課程 □議題主題式課程 □議題特色課程	課程實施時間	□領域/科目: □校訂必修/選修 ■彈性學習課程/時間
學習目標	育之心。		重要性,並激起關心海洋生態的保,並透過實際的行動參與,減緩海
總綱核心 素養	U-B2 具備適當運用科技、資訊與 技、資訊與媒體倫理的議題。	某體之素養,。 內思考與對話	創新的態度與作為因應新的情境或問題 進行各類媒體 識讀與批判,並能反思科 素養,培養良好品德、公民意識與社會 。
	與課程綱要對應	之各領域學	習重點 ii
	所學解決問題。 英 S-U-C2 積極參與課內及課 個人溝通協調能力 英 S-U-C3 尊重生命與全球的	外英語文團 及解決問題自 永續發展。	讀策略,對文本訊息深入理解,應用 團體學習活動,透過團隊合作,發展 的能力。
学省内容	Ae-V-10 故事及短劇的內容與情節	įp ∘	

	B-V-6 引導式討論。
	B-V-13 談話或短文的摘要。
學習表現	3-V-8 能了解故事的內容與情節。 3-V-13 能熟悉各種閱讀技巧(如擷取大意、推敲文意、預測後續文意), 進行快速閱 讀並有效應用於廣泛閱讀中。
	與課程綱要對應之海洋教育議題
核心素養	海 A1 能從海洋探索中,建立合宜的人生觀,探尋生命的意義,並不斷精進,追求至善善。 海 C1 能從海洋精神之宏觀、冒險、不畏艱難中,實踐道德的素養,主動關注海洋公共
	議題,關懷自然生態與永續發展。
學習主題	海洋生態之永續發展
實質內涵	海 U18 了解海洋環境污染造成海洋生物與環境累積的後果,並嘗試提出因應對策。 海 U19 了解全球的海洋環境問題,並熟悉或參與海洋保護行動。
教學資源	軟硬體設備、學習單、高中英文—龍騰 Bl L5: The Life of a Plastic Bag
教學架構	ORID 教學法(<u>附錄1</u>)

· 可參閱國家教育研究院發展之「十二年國民基本教育課程綱要國民中小學暨普通型高級中等學校議題融入說明手冊」 (12-13頁;294頁;52-57頁)。

⁽¹⁾議題融入式課程:此類課程是在既有課程內容中將議題的概念或主軸融入。融入的議題可僅就某一議題,或多項相 關議題。此類課程因建立於原有課程架構與內容,以現有課程內容為主體,就其教學的領域/科目內容與議題,適時 進行教學的連結或延伸,設計與實施相對容易。

⁽²⁾議題主題式課程:此類課程是擷取某單一議題之其中一項學習主題,發展為議題主題式課程。其與第一類課程的不 同,在於此類課程的主軸是議題的學習主題,而非原領域/科目課程內容,故需另行設計與自編教材。它可運用於國 中小的彈性學習課程、高級中等學校的彈性學習時間,以數週的微課程方式進行,或於涉及之領域教學時間中實施。

⁽³⁾議題特色課程:此類課程是以議題為學校特色課程,其對議題採跨領域方式設計,形成獨立完整的單元課程。它可 於校訂課程中實施,例如國中小的彈性學習課程、高級中等學校的彈性學習時間,或規劃成為校訂必修或選修科目。 此類課程不論是單議題或多議題整合進行,通常需要跨領域課程教師的團隊合作,以協力發展跨領域的議題教育教材。 雖有其難度且費時,但因是更有系統的課程設計,並輔以較長的教學時間,故極有助於學生對議題的完整與深入了解, 可進行價值建立與實踐行動的高層次學習;同時,亦可形成學校的辦學特色。

可參閱教育部發布之「十二年國民基本教育課程綱要」總綱及各領域綱要。

iii 可參閱教育部發布之「幼兒園教保活動課程大綱」。

(三) 教學活動設計

學習活動	時間	備註 (請說明評量方式)
第一節上課		
學習目標: 1. 利用聆聽海浪聲的方式,勾起學生對於海洋的想像,引起學習動機。 2. 比較「現實 vs. 想像」中的海洋,使學生能意識到海洋保護的議題。		
學習活動: 1. 請學生閉上眼睛並引導其進行三次的深呼吸。	3min	
 2. 播放3種不同的「海浪聲」,請學生仔細聆聽。 ①海底鯨魚聲(2:30-4:00) https://reurl.cc/jgdk6M ②溫和海浪聲(4:30-6:00) https://reurl.cc/Kr6p2y ③海浪拍打聲(4:45-6:15) https://reurl.cc/gzv0xQ 	5min	
3. 請學生針對聽到的三種不同海浪聲,各寫出一句話或是一個詞來形容海的樣子。	5min	
 教師邀請學生分享對於不同海浪聲的形容,並尋找學生回答中的共通點,拉起學生間的連結。 	7min	口語評量小組討論
5. 教師播放「海龜氣管拔出塑膠吸管全程實錄!」之短片(播至1: 10) https://reurl.cc/aN1V99, 並展示海洋被汙染的圖片(所錄 2) 給學生看,讓學生體會到想像中海洋的模樣與現實中海洋模樣的落差。	10min	
6. 英文生難詞解釋:課前需要求學生預習課文內容與單字,故本節課 針對課文重要單字進行講解,而後再導入課文內 容。	20min	
第一節結束		
第二節上課		
學習目標: 1. 利用小組討論的方式進行課文閱讀,並分組針對不同段落進行大意 摘要,使學生能學習到擷取與統整課文的能力。		
學習活動: 1. 教師由海洋汙染的議題引入,從塑膠袋的角度講解課文第一段。	8min	

2.	課前將全班先分為6組(每組6人),以小組討論的方式完成整張學習單。而後由一、二組負責上台在黑板寫下第二段課文的問題;由三、四組負責上台在黑板寫下第二段課文的問題;由五、六組負責上台在黑板寫下第二段課文的問題。(學習單見於附錄3)	15min	口語評量 -小組討論
3.	教師針對學生在黑板寫下的回答進行檢討與比較。	7min	
4.	教師隨機抽點學生回答課本 p. 108—Graphic Organizer 之問題。	10min	口語評量 -課堂參與表達
5.	Kahoot! 測驗:將課文中的重要單字及句子放入測驗中,對學生進行評量。	15min	Kahoot! 網路平台測驗
	第二節結束		
	第三節上課		
1.	·智目標: 透過「如果我是塑膠袋」的換位思考,更能深入地感受海洋保護議題的重要性。 藉由小組的討論與分享,擬定一個能保護海洋的實際行動方案並落實行動。		
I *	2智活動: 教師根據前一堂課所討論之課文內容,引導學生於小組內討論塑膠 袋存在的意義。	5min	口語評量 -小組討論與發表
2.	觀看 BBC News 影片: 塑膠袋應該如何幫助地球 (3min)。 (https://reurl.cc/ZjnWQa)	3min	
3.	教師提問:「How do you feel if you are a plastic bag?」,引導學生換位思考,想一想常常被利用完就馬上丟棄的塑膠袋之感受。	12min	
4.	除了塑膠袋的感受,教師更進一步引導學生思考:「若自己是塑膠袋,會希望人類怎麼做來幫助自己逃離悲慘的一生?」	10min	
5.	藉由上則問題的回答,請學生擬定各組別的保護海洋行動方案或深入探究海洋與環保議題,於一週內完成,並於下一堂課時展現行動成果。(呈現方式不拘,照片、影片、海報紀錄皆可)	20min	口語評量小組討論與發表
	第三節結束		
	第四節上課		
	智目標: 落實海洋保護之行動方案,實踐海洋保護之精神。		

2. 分享海洋保護行動方案之實踐過程與成果,展現保護海洋生態的決心,同時訓練上台說話的能力。
學習活動:

1. 各小組(共6組)上台分享行動方案實施成果:報告時需呈現海報、行動方案實施之照片,及其他可以展現成果之任何媒材。
2. 各小組給予其他組別正向回饋。
3. 教師進行總結,並回饋各小組之行動方案成果。
4min

3. 教師進行總結,並回饋各小組之行動方案成果。
4min

(四)教學實踐、教學省思、成長與建議

教學實踐情形與成果

- 1. 實際教學時,教師請學生課前預習,進行分組討論課文學習單,雖教師已針對課文生難字詞講解 且對第一段進行示範,然解釋字詞時,未特別對全文文意理解加以說明,於是直接讓學生分組討 論時,易產生文意理解困難等情形。因此,分組討論學習單前須建立好足夠的學習鷹架,且要求 學生達成任務之指導語須清楚明確(如小組成員該做何事),且若時間允許,可帶領全班學生閱讀 文章。
- 因本教學設計最後讓學生產出自己的保護海洋行動方案,教師先行示範海報讓同學有大方向可以依循,不僅身教,也能製造課堂間有趣的互動。
- 3. 成果發表會的總體表現與原訂的「海洋保護行動方案」豐富許多,學生不僅實踐之,更從分析塑膠製造的根源,到創意呈現「海龜與水母」的故事,從學生的日常生活中,發掘原來「環保」離我們很近。

教學省思、成長與建議

- 1. 教師們一開始接觸海洋議題都很陌生,因此在搜尋資料的過程中不斷加值自己對於海洋議題的知識量,以及發現海洋教育當中亦有核心素養的存在,經過無數次彼此討論其核心概念與內涵,才真正確立三位教師正確理解海洋教育之核心素養。理解海洋教育的核心素養後,接下來是素材的選取,因三位教師皆來自於不同領域,在取材方面上至海洋文化、下至戲水安全等過於多元,一時難以聚焦主題。後來我們以學生生活經驗出發,藉由英語文領域內既有的單元進行教案發想,融合有別於學生過去學習經驗的活動設計(如聆聽海浪聲想像海洋),使學生能初步對海洋環境保護等議題有基本概念。
- 2. 議題融入教育是新課網推動的焦點,學生對於19項議題縱然不是特別熟稔,卻也略知一二,於是教學的重點在於「喚起學生的情感經驗」,因此教學活動中,運用學生的五感,使其重新思索自身對於海洋的想像,與現實情況的對比與落差,更能意識到議題的重要性。經由此次教案設計,教師能適切地篩選素材,並以貼近學生生活經驗作為教學起點,不僅是教學議題的入門,也藉由這次機會與學生共同成長。
- 3. 學生過往較少接觸議題類型的課程,故教師在設計教案時,宜給予多一點的前導活動,且避免落入學科本位的思考模式、斷裂式地教授學科知識,而是要在議題教學中設定學生能達成的學習目標,以質性評量(如教師口頭綜合評量)兼量化評量(同儕互評)的方式,對學生的學習表現給予正面回饋。誠如本班的表現,雖與原先設定之「海洋保護行動方案」教學目標有落差,然而可以從中看出學生收集資料、統整分析的能力,甚至在台上也毫不怯場,都是當時設定學習表現時,教師們意想不到的收穫!

(五) 附錄

附錄資料

一、附錄清單說明:

1. 附錄1: ORID 教學法。

2. 附錄2:海洋被汙染的圖片。

3. 附錄3: 課文閱讀學習單。

4. 附錄4: 學生作品。

5. 附錄5: 成果發表會大合照。

6. 附錄6: 教學影片(1-7)

二、附錄內容:

附錄1

- 1. 0: Objective,客觀、事實,指學生觀察到的客觀事實。
- 2. R:Reflective, 感受、反應,根據前項客觀事實,學生產生的感受及反應。
- 3. I: Interpretive, 意義、價值、經驗,依前項之感受與反應,學生反思對於議題之於自身的意義及價值為何。
- 4. D: Decisional,決定、行動,學生意識議題之於自身的意義及價值後,願意做出的改變與行動。

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- 想像中海洋的模樣為何?
- 觀看「海龜氣管拔出塑膠吸管全程實錄!」影片後,想像和 現實是否有落差?

R

- 現今海洋環境與理想的落差為何?
- 經由兩項活動,你的感受是什麼?

- 换位思考:「如果我是塑膠袋」,我如何看待海洋環境問題?
- 當自己是塑膠袋,希望人類可以有什麼作為?

D

- 回到人類身分,我們能做出什麼改變?
- 需要考量哪些因素幫助我們達成目標?

附錄2

海洋被汙染的圖片







圖片來源:

- 1. https://reurl.cc/logqaW
- 2. https://reurl.cc/ZjQv51
- 3. https://reurl.cc/DZvEQ5

附錄 3

龍騰英文 B1L5 The Life of a Plastic Bag Worksheets

Class	No.	Name

I am a plastic bag. When I was very young, I was sent from the factory to a convenience store. I stayed there for a long time and waited eagerly to be used. Finally, some kids came along, bought some snacks, and took me along to the beach for a picnic. When it was getting dark, they packed everything up and let me stay there alone! The wind started to howl, and suddenly I was in the sea all on my own.

•	Please describe the journey of the plastic bag.

I floated helplessly in the water for a while, but soon realized I wasn't alone. I was surrounded by plastic cups, plates, and straws. After days of drifting, I started to envy the birds up above, who were flying so high and free. I could only follow the currents. Suddenly, I went down a tunnel into a chamber. "What happened?" I asked a fork next to me. "I think we were just swallowed by a huge fish!" he replied. More and more of us were swallowed until it got quite crowded inside. We obviously weren't that nutritious because the fish died after a few days.

lease notic	that how do the plastic bag feel during the floating process.

The fish's body slowly decomposed, and then I was back in the ocean. One day, a big wave came and threw me up onto the shore. A few days later, some schoolchildren walked up to me. They were carrying bags and pairs of tongs. I felt a sudden pinch, and the next thing I knew, I was inside a big bag of trash. At eacher told the schoolchildren, "Because of all the littering, a lot of plastic products end up in the ocean. They are then consumed by different sea creatures. You might think that's okay, but when we eat seafood, the poisonous substances from the plastic end up inside us and make us feel sick."

	What's happened to the plastic bag?
•	What's the lesson that the teacher wants to teach?
	According to a plastic bottle nearby, the humans are going to take us to a
bet	eycling plant. I really don't understand them. They produce us to make their lives tter, but then they misuse us and make everyone's life worse! I'm tired of floating bund, killing fish, and causing harm to the environment. I really hope that my future
	mer will use me properly in my next life.
•	What's the end of the plastic bag?
•	Please notice that the plastic bag's emotion and what are the wishes that it makes.

附錄4:學生作品

1. 聽海浪聲音寫下對海洋的描述









2. 課文閱讀學習單



I am a plastic bag. When I was very young, I was sent from the factory to a onvenience store. I stayed there for a long time and waited eagerly to be used. Finally, some kids came along, bought some snacks, and took me along to the beach for a picnic. When it was getting dark, they packed everything up and let me stay there alone! The wind started to howl, and suddenly I was in the sea all on my own

Please write down the journey of the plastic bag.

I floated helplessly in the water for a while, but soon realized I wasn't alone. I was surrounded by plastic cups, plates, and straws. After days of drifting, I started to envy the birds up above, who were flying so high and free. I could only follow the currents. Suddenly, I went down a tunnel into a chamber. "What happened?" I asked a fork next to me. "I think we were just swallowed by a huge fish!" he ruplied. More and more of us were swallowed until it got quite crowded inside. We obviously weren't that nutritious because the fish died after a few days.

Where did the plastic bag float to?

Please notice that how does the plastic bag feel during the floating process.

The fish's body slowly decomposed, and then I was back in the ocean. One day, a big wave came and threw me up onto the shore. A few days later, some schoolchildren walked up to me. They were carrying bags and pairs of tongs. I felt a senociameters waiter up to me. It is yever earlying togs also pairs or songe. For a sudden pinch, and the next thing I known, I was inside a lip beg of crush. A teacher toold the schoolchildren, "Because of all the littering, a lot of plantse products end up in the ocean. They are then consumed by different sea creatures. Your night think that's olary, but when we cat scarlbod, the poisonous substances from the plastic end up inside us and make us feel sick."

What happened to the plastic bog?

products What's the lesson that the teacher wants to teach?

Transaction my to the arising 30

Pet let of plastes when me cold sentent, the passeness substances from the plaster

and my implies us and make up took sich.

According to a plastic bottle nearby, the humans are going to take us to a recycling plant. Treally don't understand them. They produce us to make their lives better, but then they misuse us and make everyone's life worse! I'm tired of flouting around, killing fish, and causing harm to the unvironment. I really hope that my future owner will use me properly in my next life.

Please notice that the plastic bag's emotion and what are the wishes that it

It's a good try for you to write the whole sentences in English. I look forward to your wext workshort

環腺英文 BIL5 The Life of a Plastic Bag Worksheets

I am a plastic bug. When I was very young, I was sent from the factory to a twentence store. I stayed there for a long time and waited eagerly to be used. Finally, some kids came along, bought some anacky, and took me alone to the beach for a picnic. When it was getting dark, they packed everything up and let me stay there alone! The wind started to how!, and suddenly I was in the sea all on my own.

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The fish's body slowly decomposed, and then I was back in the coean. One day, a big wave came and there me up conto the islane, A few days later, some, a schoolchildren walked up to me. They were carrying bugs and pairs of times. I felt a sudden to the meet thing I knew, I way inside a big bug of reach. A seacher rold the coean. They are then colorating by different sea certainty. You might think that's olar, but when we cut reafood, the poisonous substillers; from the plastic end up to the coefficients of the control of the coefficients. inside us and make us feel sick."

What happened to the plastic bag? It backed in the ocean, and washed where by a big more.

And walked up by schoolchildren.

School children waked up to
the plassic bag. (BERE) Nice explanation in Chinese!

According to a plastic bottle nearby, the humans are going to take us to ure year glast. I really don't understand them. They produce us to make their lives better, but then they invise us and nuke everyone's life worse! I'm tirred of floating around, killing fish, and causing him to the environment. I really hope that my future more will use a proceeds in our exercise. owner will use me properly in my next life.

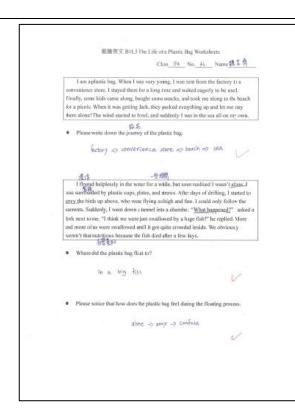
What's the end of the plastic bug?

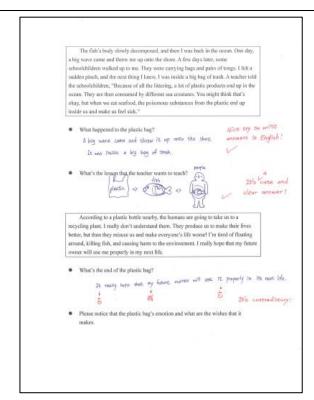
Please notice that the plastic bug's emotion and what are the wishes that it mokes.

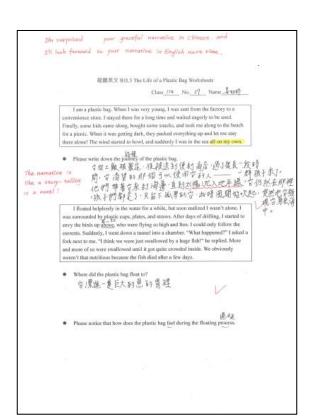
It was tired of flooting around, killing fish, and causing horm to the environet. It hoped that its future owner will use it properly.

It's a nice try to write

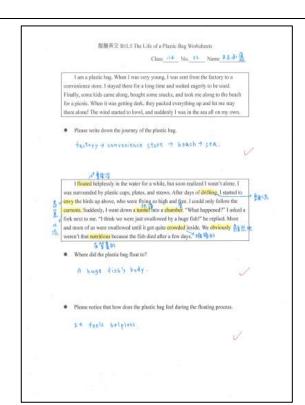
answers in English ; just keeping it!











The fish's body slowly decomposed, and then I was back in the ocean. One day, a big wave came and threw me up onto the shore. A few days later, some schoolchildren, "Because of all the litering, a lit of plastic products end up in the exhoolchildren," Because of all the litering, a lit of plastic products end up in the ocean. They are then consumed by different sea creatures. You might think that's oloug, but when we as earlood, the polonous substances from the plastic end up inside us and make us feel sick."

• What's the lesson that the teacher wants to teach?

We litter lots of plastic products in the ocean,

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• What's the end of the plastic bug?

It was I noide a big bag of trash.

• Please notice that the plastic bug?

It was I noide a big bag of trash.

• Please notice that the plastic bug's emotion and what are the wishes that it makes.

Forceastic word chart you chose!

It is pasticled.

The wished shad can be used properly in its hext life.

附錄5

