

附件四：

新北市110年度教師跨領域全英語授課教案設計  
(參考範例-課程實施後)

設計者 / 服務學校	北大國小 黃如鈺老師 北大國小 許曼淳老師 北大國小 陳民峰老師	
教案名稱	MIXED	
教學年級：國小 <u>4</u> 年級	課程上使用之英語比例：80% (本比例係指教師以英語授課之時間佔總授課時間之比率)	
學生人數： <u>30</u> 人	教學總節數： <u>2</u> 節	公開授課內容為第 <u>2</u> 節
公開授課之時間： <u>110</u> 年 <u>11</u> 月 <u>25</u> 日 <u>13</u> 時 <u>30</u> 分至 <u>14</u> 時 <u>10</u> 分 ( <u>第五</u> 節課)	公開授課之地點：新 北市 <u>三峽</u> 區 <u>北大</u> 國小 <u>英語B</u> 教室	公開授課之教師： 姓名： <u>黃如鈺</u> 服務學校： <u>北大國小</u> 專長領域： <u>英語教學</u>

核心素養	總 綱	英語： B1 符號運用與溝通表達 具備理解及使用語言、文字、數理、肢體及藝術等各種符號進行表達、溝通及互動，並能了解與同理他人，應用在日常生活及工作上 自然： B1 符號運用與溝通表達 具備理解及使用語言、文字、數理、肢體及藝術等各種符號進行表達、溝通及互動，並能了解與同理他人，應用在日常生活及工作上。 C2 人際關係與團隊合作 具備友善的人際情懷及與他人建立良好的互動關係，並發展與人溝通協調、包容異己、社會參與及服務等團隊合作的素養。
	領 綱	英-E-B1 具備入門的聽、說、讀、寫英語文能力。在引導下，能運用所學、字詞及句型進行簡易日常溝通。
學習重	學習表現	英語： 3-II-2 能辨識課堂中所學的字詞。 3-II-3 能看懂課堂中所學的句子。 4-II-4 能臨摹抄寫課堂中所學的句子。 6-II-1 能專注於教師的說明與演示。

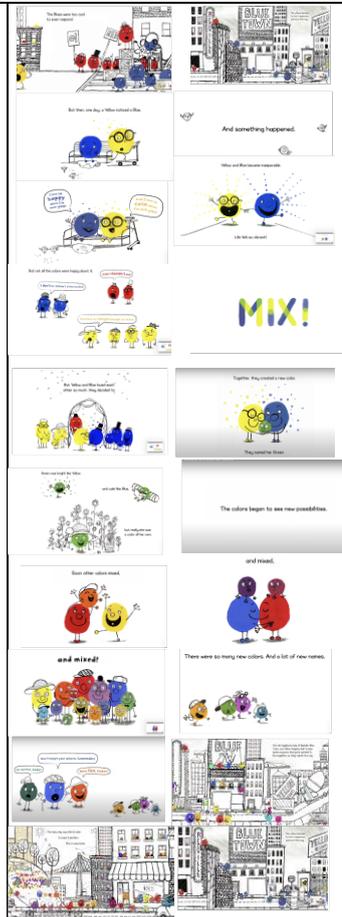
點		<p>6-II-2 積極參與各種課堂練習活動。</p> <p>9-II-1 能夠將所學字詞做簡易歸類。</p> <p>自然：</p> <p>tr-II-1 能知道觀察、記錄所得自然現象的結果是有其原因的，並依據習得的知識，說明自己的想法。</p>
	學習內容	<p>英語：</p> <p>Ac-II-3 第二學習階段所學字詞。</p> <p>B-II-1 第二學習階段所學字詞及句型的生活溝通</p> <p>D-II-1 所學字詞的簡易歸類。</p> <p>自然：</p> <p>INc-II-6 水有三態變化及毛細現象。</p>



- What are they doing?
- Where are they?
- Why do they live in different part of the city?

[Wrap up]

Watch the story on Youtube:  
<https://youtu.be/SIbGioTNs4M>  
 and announce what we are going to do in the next period.



- Title, illustration, author, illustrator.
- The title of the book is Mixed.
- The author is Arree Chung.
- What do you see on the front cover?
- Yes. Colors.
- How many colors do you see? What are they?
- Yes. Red, blue and yellow.
- Can someone tell me what you think the story is?
- It's OK to guess and there's no right or wrong answers.
- OK. Let's talk about the story.
- Before moving on to the story. There are three questions would like you to think of while listening to the story. I'll ask you later.
- Questions are:
- 1. Who are they in the story?
- 2. What are they doing?
- 3. Where are they?
- Let's start the story.
- OK. Let's see who can answer the three questions. Please raise you hand.
- Excellent! You've got it right.
- Ok. Let's watch the story on YouTube.
- Next period, we're going to do an experiment about

				<p>Mixing Colors ◦</p> <ul style="list-style-type: none"> <li>● See you next time.</li> </ul>
<p>第二節</p>	<p><b>[Warm up]</b></p> <ul style="list-style-type: none"> <li>● Greet the class.</li> <li>● Review the colors they just learned: red, blue and yellow.</li> <li>● Let students predict what colors will show up if they mix two colors together? <ul style="list-style-type: none"> <li>■ Blue + yellow = green</li> <li>■ Red + yellow = orange</li> <li>■ Blue + red = purple</li> </ul> </li> <li>● Watch a YouTube video that explains how to do the experiment. YouTube video: <a href="https://www.youtube.com/watch?v=hGwG-ZEfw&amp;ab_channel=Ryan%27sWorld">https://www.youtube.com/watch?v=hGwG-ZEfw&amp;ab_channel=Ryan%27sWorld</a></li> </ul> <p><b>[Presentation]</b></p> <ul style="list-style-type: none"> <li>● Students would work in groups to do the experiment and finish the worksheet. Each group has four students. Each student has a number. They need to do different tasks.</li> <li>● Teacher explains the things that students are going to use: cups, paper towels, a water bottle and food colors.</li> <li>● Teacher would show students how to do the experiment step by step. They need to do the first and prediction part and follow the procedures. <ul style="list-style-type: none"> <li>■ Step 1: Pass down the materials they need.</li> <li>■ Step 2: Number 1 take out three empty cups, drop the food colors (five drops) in the cups and Number 2 pour water to the red line.</li> <li>■ Step 3: Number 3 put three empty cups between each color cup and make a circle.</li> <li>■ Step 4: Number 4 put the paper towels into each two cups. Other students can also help.</li> </ul> </li> <li>● Students need to discuss and observe how the water goes and color the cups and arrows on the worksheet.</li> </ul> <p><b>[Wrap up]</b></p> <ul style="list-style-type: none"> <li>● Teacher focuses on the explanation part. Invite students to discuss and give the answers.</li> <li>● At last, Teacher leads the class to read the explanation out loud.</li> </ul>	<p>10 mins</p> <p>20 mins</p> <p>10 mins</p>	<ul style="list-style-type: none"> <li>● PowerPoint</li> <li>● Picture books</li> <li>● Flashcards</li> <li>● YouTube</li> </ul>  	<ul style="list-style-type: none"> <li>● Do you remember the colors we just learned last week?</li> <li>● Can you tell me what are they?</li> <li>● Now take a guess. Blue and red will make what color?</li> <li>● Very good. So purple is made from blue and red.</li> <li>● Now we are going to watch a video.</li> <li>● We are going to do the same experiment today!</li> <li>● First, Number 1 please come to the front, get the container and take out three cups.</li> <li>● Second, Number 2 take out the food colors. One cup for one color. Drop five drops. Number 3 take out the water bottle and pour the water to the red line.</li> <li>● Third, we need paper towels. Number 4 please put the paper towels in each two cups. Other students can help.</li> <li>● You need to work together to finish the experiment.</li> <li>● Time's up! Everyone starts to clean up.</li> <li>● What will happen to the paper towels and the water?</li> <li>● You can discuss with your friends.</li> <li>● What is capillary action?</li> </ul>
<p>附錄（學習單或其他教學相關資料）</p>				

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Number: \_\_\_\_\_

## Color Mixed Experiment



Please circle the things we need!

paper towels water juice a book a ruler  
food colors cups cookies candies a bag

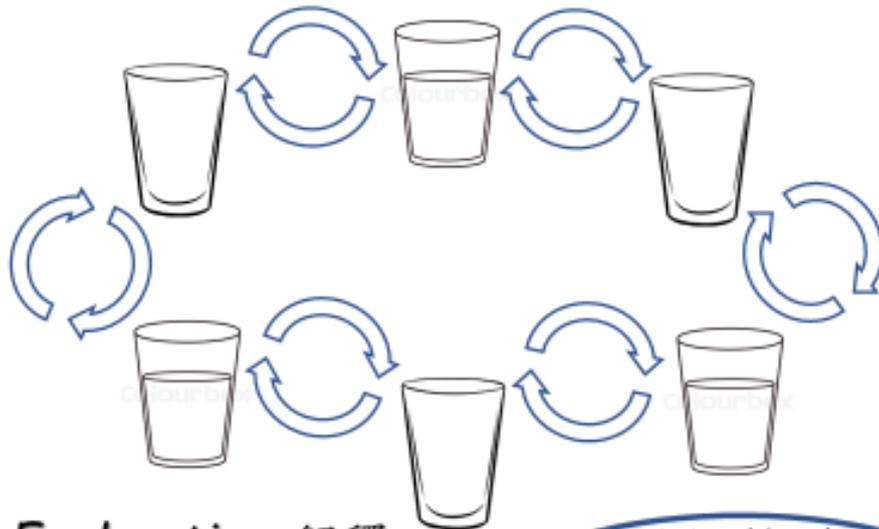
### Prediction 預測

1. Yellow + blue make \_\_\_\_\_.
2. Yellow + red make \_\_\_\_\_.
3. Red + blue make \_\_\_\_\_.

green purple orange

### Observation 觀察

How does the water travel/go? Please color the water and the arrows.



### Explanation 解釋

Word bank:

Capillary action water  
paper towel

\_\_\_\_\_ 毛細現象 is the process when  
\_\_\_\_\_ moves up through a solid, like \_\_\_\_\_.  
This happens because of cohesion 凝聚力,  
adhesion 附著力, and surface tension 表面張力.

