The G3 KCFS Gazette

Kang Chiao International School, Hsinchu Campus, International Department

April 2023

Weather Instruments
氣象儀

Meteorology

Meteorology is the study of the Earth's atmosphere and the variations in temperature and moisture patterns that produce different weather conditions. Some of the major subjects of study are such phenomena as precipitation, atmospheric pressure and wind patterns. Meteorology is also one of the most sought after STEM careers especially with major changes to our climate in recent times. Therefore it was a great way to introduce the grade 3 students to the next level of problem solving as they took on the weather challenge.

Creating Instruments

Students were presented with a real life scenario that required them to collect and report data provided by weather instruments in order for them to forecast the weather in a similar fashion as meteorologists. To be able to accomplish this task, they had to understand weather and how we actually predict or forecast. Each class had to create an anemometer, barometer, wind vane and, rain gauge for this task.

The key learning objective was to be able to gather information, in other words read their instruments and then present the data on a graph. This gave the students a great opportunity to discover, share and collaborate as they put their instruments to the test and became meteorologists during this project.

氣象學

氣象學是對地球大氣層以及導致不同天氣條件的溫度和濕度模式變化的研究。一些主要的研究主題為降水、大氣壓力和風向等現象。 氣象學也是最受歡迎的STEM職業之一，尤其是近年來我們的氣候發生了重大變化。本次學習天氣相關的挑戰也是讓三年級學生學習如何解決問題的好方法。

建立儀器

學生先看了現實生活實例，並且收集氣象儀所提供的數據，以便他們能像氣象學家一樣預測天氣。為了能夠完成這項任務，學生必須了解天氣以及如何實際預測或預報。每班學生都必須製作風速計、氣壓計、風向標和雨量計。

學生主要學習目標為收集信息，換句話說就是理解自己的儀器，並在圖表上呈現數據。此次專題給予學生探索、分享和合作的機會，並化身為氣象學家對氣象儀進行測試。

1 ASK + IMAGINE 提問 + 創思 2

We studied weather patterns, predictions and forecasting.
我們研究天氣模式、預測和預報。

3 PLAN 計畫

We planned the design of our instruments to collect data.
我們規劃和設計儀器，以便能夠收集數據。

4 CREATE 創造

It was a huge task to create working instruments but we rose to the challenge.
製作能運作的氣象儀是一項艱鉅的任務，但我們接受了挑戰。

5 IMPROVE 改進

We tested our instruments, made some improvements and gathered data.
我們測試了儀器，收集了數據並進行改進。

Rain Gauge: Measures precipitation