



# 專題寫作-生物類

陳志郎

A colorful illustration of a school building. On the left, there is a bell tower with a golden bell hanging from a red roof. Below the bell tower is a red double door with two small windows. To the right of the door is a window with a white frame and a small balcony. The building is set against a light blue sky with soft clouds. The overall style is simple and cartoonish.

# 學習目標

- 引導學生閱讀生物科普書籍和期刊
- 完成生物類行動研究或小論文撰寫



# 教學大綱

- 研究論文與科普文章的差異
- 生物研究方法
  - 觀察與紀錄
  - 假設與推論
- 數據處理工具
  - Excel的資料處理

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# 教學大綱

- 探索方向

- 生物各類主題探討

- 聯合國永續發展目標

- (Sustainable Development Goals, **SDGs**)之生物相關

# 生物相關目標



1 消除貧窮



2 終止飢餓



3 良好健康  
與社會福利



4 良質教育



5 性別平等



6 清潔飲水  
和衛生設施



7 經濟適用的  
清潔能源



8 體面工作和  
經濟增長



9 產業、創新和  
基礎設施



10 減少國內及  
國家間不平等



11 永續發展  
的市鎮規劃



12 確保永續消費  
和生產模式



13 氣候行動



14 保育及維護  
海洋資源



15 保育及維護  
生態領地



16 和平、正義與  
健全的司法



17 促進目標實現  
的夥伴關係



SUSTAINABLE  
DEVELOPMENT  
GOALS

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# 教學大綱

- 寫作要領

- 行動研究 架構解析

- 發現問題
    - 擬定行動計畫
    - 執行、調查
    - 分析、驗證
    - 結果與結論

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# 教學大綱

- 寫作要領

- 生物論文架構解析

- 研究動機及研究目的
    - 研究設計
    - 研究方法
    - 結果與結論



# 教學大綱

- 資訊利用

- 生物科普文章搜尋
- 研究論文學術搜尋

- 資訊素養

- 生物科普文章閱讀
- 生物學術論文閱讀
- 參考文獻的寫法與修正

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# 教學大綱

- 試寫、發表與回饋
  - 研究動機及研究目的  
或發現問題
  - 研究設計及研究方法  
或行動計畫



# 教學大綱

- 進度檢核
  - 研究結果報告
  - 討論與結論報告
- 作品呈現與回饋
  - 行動研究報告
  - 小論文報告