

# 提升學生在獨立專題探究 報告的分析及論證能力



## Independent Enquiry Study

Independent Enquiry Study (IES) has two assessment stages: Project Proposal Stage and the Product Stage. Each assessment stage comprises two assessment items: Process and Task, which account for 20% and 40% of the total IES mark respectively.

# 獨立專題探究評核實施現況

A total of 488 schools participated in IES this year. The Process mark of IES was not moderated. Data on the moderated Task mark shows that 62.2% of schools fell into the 'within the expected range' category, with 17.2% of schools giving marks higher than expected and 20.6% giving marks lower than expected. However, among the schools with marks higher or lower than expected, the majority only deviated slightly from the expected range. The proportion of schools in the 'within the expected range' category remains about the same as that in 2015.

As in previous years a seminar was held to brief teachers on the general performance of IES in the 2015 examination to enhance their understanding of the requirements of IES. In the seminar, the Structured Enquiry Approach and the corresponding marking guidelines, which are applicable to the 2017 Examination and beyond, were explained. The IES Supervisor and District Coordinators shared some strategies to help students of various abilities to conduct the IES. District Coordinators held group meetings with School Coordinators to share their experience of using various teaching tools to facilitate the conduct of IES. In addition, annotated exemplars of Products and samples illustrating various levels of performance were uploaded to the HKEAA websites <http://www.hkeaa.edu.hk/en/hkdse/assessment/>. Teachers and students may refer to these samples to gain a better understanding of the requirements and marking standard of IES.

Below, we comment on students' Process performance and their Task performance in the Product Stage.

### Performance in Process

District Coordinators have continued to liaise with schools in order to understand how they help students to complete their Tasks with school-based Process assessment activities, such as mind-maps and group discussions on formulating the enquiry question. After reviewing the Process marks submitted by schools, a small number of schools were found to have awarded narrow mark ranges, an issue which also arose last year. For these cases, District Coordinators reviewed the assessment documents and discussed methods of improvement with the School Coordinators.

### Task Performance in Product Stage

A prerequisite for producing a good Task is having an enquiry topic with a clear focus and an appropriate level of difficulty. This year, the proportion of student's tasks achieving this prerequisite continued to be high. This reflects that teachers and students had a good understanding of the learning objectives of IES, and as a result were able to formulate feasible topics worthy of enquiry. However, some Products were undermined by being too wide in scope or having unclear focus questions. This situation should be brought to the attention of students.

With regard to the tools for data collection, many students used a variety of tools and there was an improvement in the situation of over-relying on questionnaire surveys. When conducting questionnaire surveys, students should pay attention to the relevancy and reference value of their survey targets. When conducting online surveys, they must consider the characteristics of Internet users and the limitations of the sampling process. The number of students using second-hand data for analysis keeps increasing. Students are reminded to

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透過學與教可進一步  
提升的空間

題目範圍及  
探究模式可  
更多元化

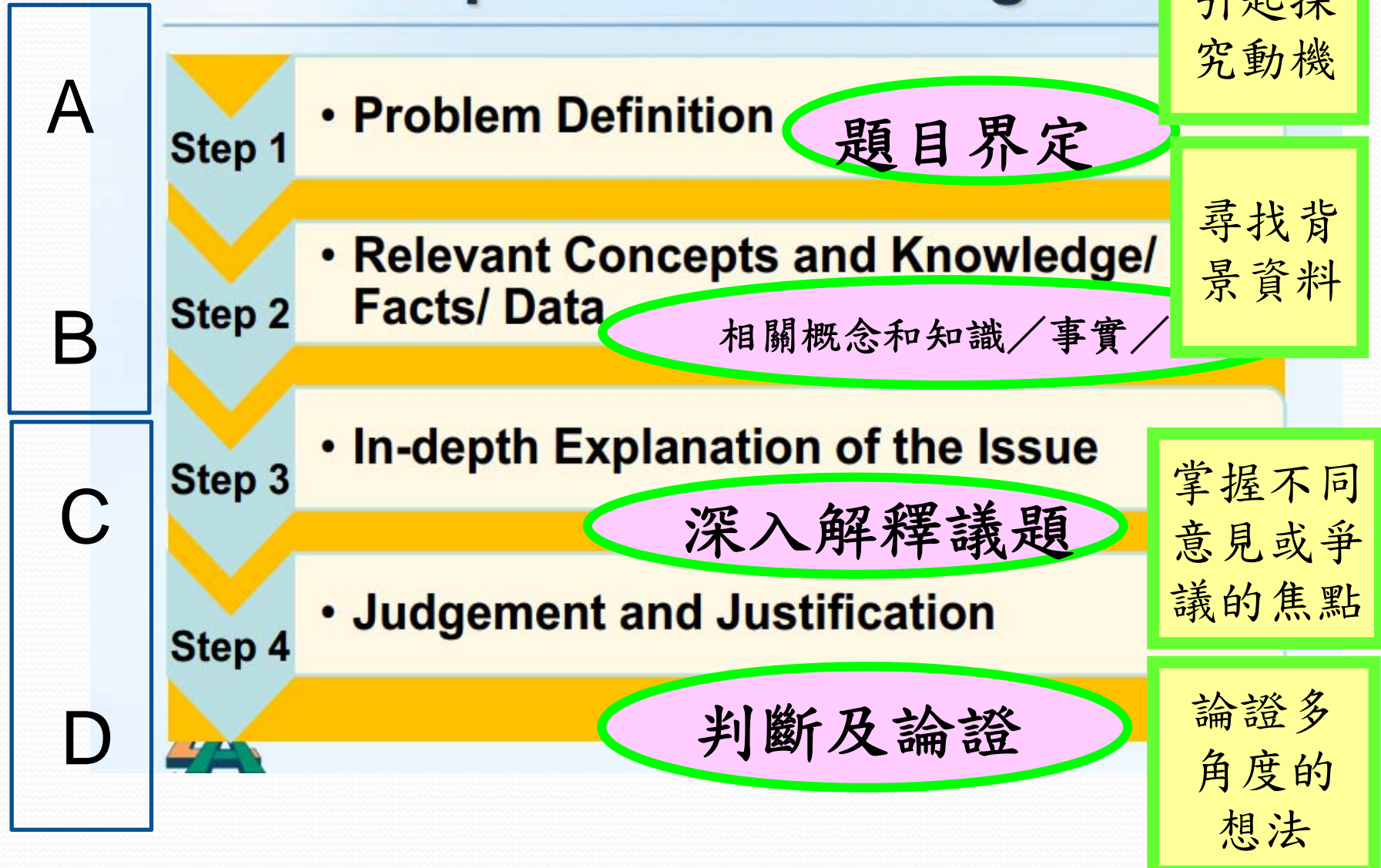
將IES製作過  
程增潤為  
課堂學習

善用機構的  
統計數據/  
研究報告

可加強探究的  
線性邏輯關係

## 2. 獨立專題探究評核架構及要求

### Four Steps in Conducting IES



# AB x 3

# CD x 5

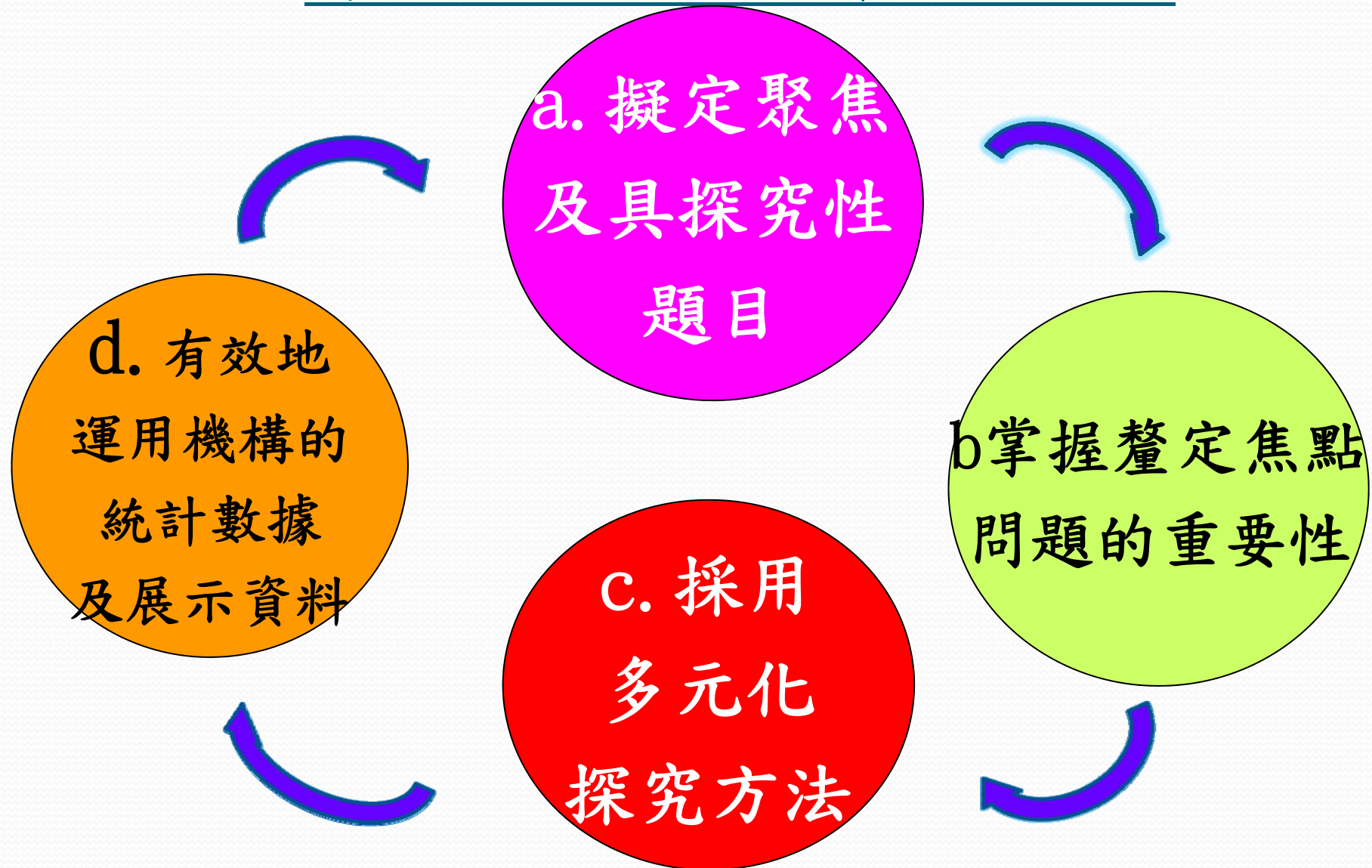
# PO x 1

獨立專題探究報告的評分指引

表現水平 (分數)#	題目界定和概念／知識辨識 (比重:3)	解釋和論證 (比重:5)	表達與組織* (比重:1)	自發性 (比重:1)
表現卓越 (7-9分)	<ul style="list-style-type: none"> <li>訂立及清楚闡釋探究焦點及範圍、探究方案(例如探究向度)／資料搜集方法；清晰表達議題的重要性</li> <li>清楚指出所需及極具相關性的概念／知識，並解釋與該探究的相關性為何及可如何應用在該探究上</li> </ul>	<ul style="list-style-type: none"> <li>應用非常有用的資料</li> <li>把分析、論證及資料的相關性緊密地連繫起來</li> <li>就極具相關性的概念及知識／事實／最新資料，清楚指出並明確及合乎邏輯地解釋有關因素／影響／關係／主要持份者的看法／分歧／議題隱含的價值觀</li> <li>就極具相關性的概念及知識／事實／最新資料，全面及合乎邏輯地論證其立場／選擇／決定，展示高水平的邏輯推理及多角度思維力</li> <li>能提供與議題及探究問題相關且具洞察力的意見／觀點，並輔以有力的論據</li> <li>從不同角度作全面分析，以回應議題及探究問題</li> </ul>	<ul style="list-style-type: none"> <li>以連貫和一致的結構，簡明及有條理地傳意</li> <li>有效使用資料(例如以照片、圖、表及數據等形式的資料)</li> <li>清楚和準確註明資料來源</li> </ul>	<ul style="list-style-type: none"> <li>在整個探究過程中，有證據顯示考生主動、有應變能力，也能在毋須催促下解決困難及作出反思</li> <li>懂得分配時間，並能如期完成工作</li> <li>持續改進</li> </ul>
表現滿意 (4-6分)	<ul style="list-style-type: none"> <li>嘗試訂立探究焦點、範圍、探究方案(例如探究向度)／資料搜集方法及指出意義，但欠清晰，或對議題的重要性理解不足</li> <li>簡單指出一些概念，但不全然相關；雖嘗試解釋這些概念與該探究的相關性及如何應用在這探究上，但欠清晰；或</li> </ul>	<ul style="list-style-type: none"> <li>運用尚算有用的資料，但或資料份量不足，也或沒有清晰地把資料與分析及論證連繫起來</li> <li>簡單解釋因素／影響／關係／主要持份者的看法／分歧／議題隱含的價值觀，但欠清晰，也不深入；運用基本／非完全相關的概念及知識／事實／或不準確及／或過時的資料</li> <li>運用非完全相關的概念及知識／事實／或不準確及／或過時的資料來論證其立場／選擇／決定，在某些地方發現邏輯推理有誤及理據欠充份</li> <li>提供與議題及探究問題有關的意見／觀點，並</li> </ul>	<ul style="list-style-type: none"> <li>雖有組織架構，但偶有欠連貫性、意念或欠完整和表達欠妥善的地方</li> <li>大致恰當使用資料(例如以照片、圖、表及數據等形式的資料)</li> <li>註明資料來源，但有遺漏／不準確的地方</li> </ul>	<ul style="list-style-type: none"> <li>在探究過程中能解決一些困難</li> <li>有時可如期完成工作／教師須時加催促</li> <li>付出一些努力以改善</li> </ul>



### 3. 指導學生提升及 有效地展示其分析論證能力



# A 擬定聚焦及具探究性題目

## 「好」題目的特性

除了**連繫性高**（與學生、與課程）及**可行**外，也應

◆具分析性及探究性（可考慮屬分析、比較、或評估類型）

◆明確及聚焦（具特定的研究對象、研究範圍、探究焦點如可行性、程度、影響性）



幫助學生在解釋及論證部分  
（**C及D部分**）有更深入的討論

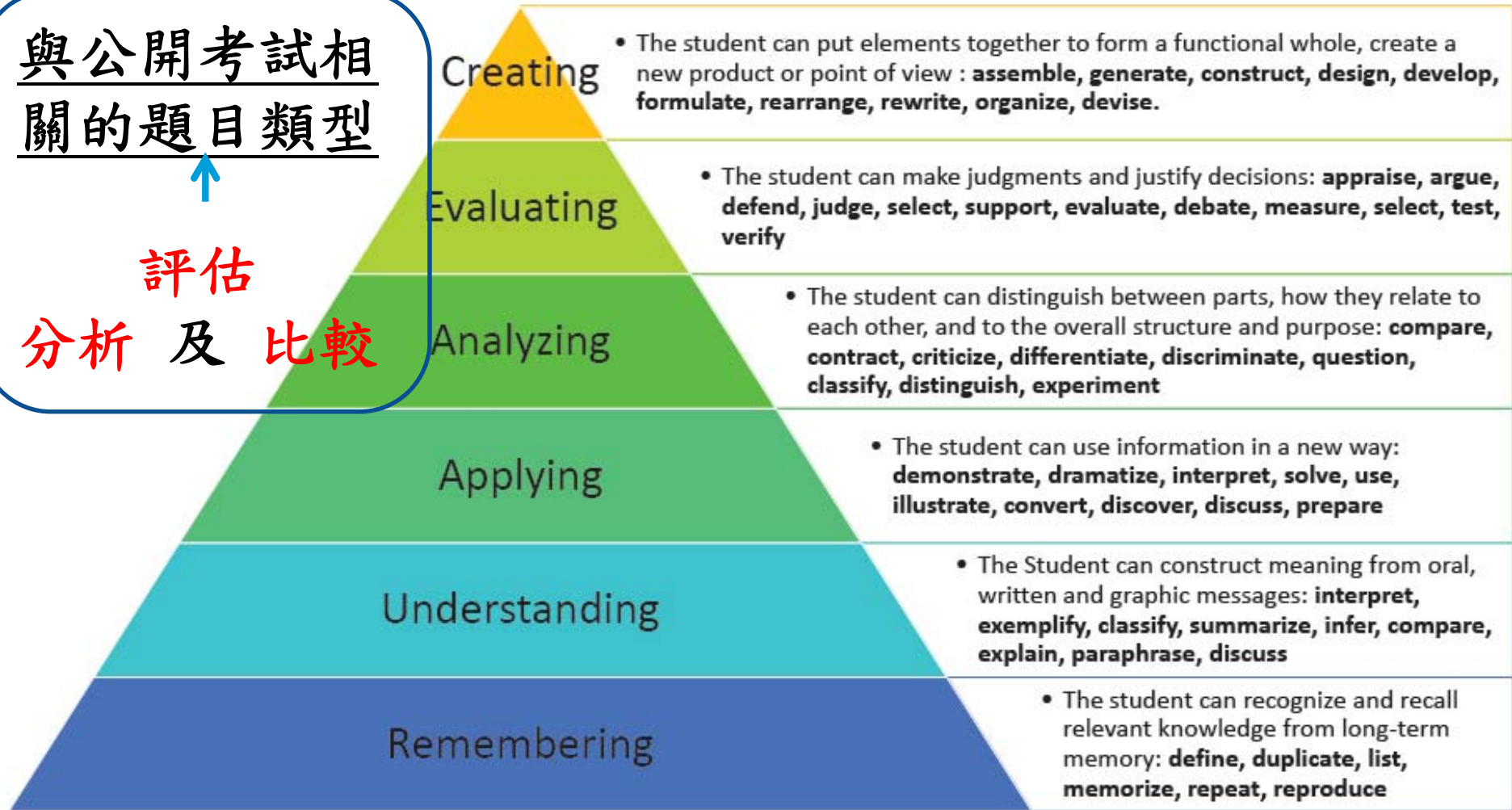


# 參考理論與公開考試相關題目類型

與公開考試相關的題目類型

評估

分析及比較



## B 檢視「焦點問題」

- ◆ 焦點問題是否回應探究題目？
- ◆ 焦點問題是否清晰、具體而聚焦？
- ◆ 焦點問題的探究重要是否由淺入深？
- ◆ 焦點問題是否具有C、D兩部份特性？



- ✓ 清晰地釐定要搜集甚麼**具體資料**
- ✓ 為未來的**探究方向**展示了**明確的路徑**
- ✓ 在選定**研究方法**時提供了**清楚的準則**

## 議題探究：由淺入深

## 相關重點

### C. 深入解釋議題

– 分析成因、影響、  
理解分歧和衝突

- 多角度思考：多因多果
- 不同的價值觀、利益與信念
- 展現良好的歸納能力

### D. 判斷及論證

– 作出評鑑、判斷、  
表達立場、探求出  
路

- 考慮多方面的論據
- 權衡正反兩方的觀點
- 提出立場和理據，並加以解釋
- 對焦問題，提出建議和解釋
- 展現明辨性思考能力和創造力



# C 採用多元化探究方法的切入點

方法學	簡介	題目舉隅	探究方法舉隅
文章分析法	選取一個具爭議性議題，搜集不同持分者意見，加以分析，並提出自己的建議	政府應否以垃圾徵費減少固體垃圾數量	<ul style="list-style-type: none"><li>• 了解背景</li><li>• 搜集資料（不同持分者論點 / 與多角度面向分析；再加簡單一手資料搜集，如實地考察、訪談）</li><li>• 歸納觀點及分析</li><li>• 提出己見</li></ul>

## 調查結果：

第一題： A. 24 票      B. 52 票      C. 8 票      D. 16 票

第二題： A. 10 票      B. 65 票      C. 17 票      D. 8 票

第三題： A. 13 票      B. 42 票      C. 61 票

第四題： A. 45 票      B. 37 票      C. 18 票

第五題： A. 55 票      B. 43 票

第六題： A. 37 票      B. 15 票      C. 8 票      D. 25 票

其他： C. 3 票

第六題： A. 11 票      B. 7 票      C. 9 票      D. 16 票      E. 2 票

第七題： A. 47 票      B. 21 票      C. 32 票

第八題： A. 12 票      B. 63 票      C. 25 票

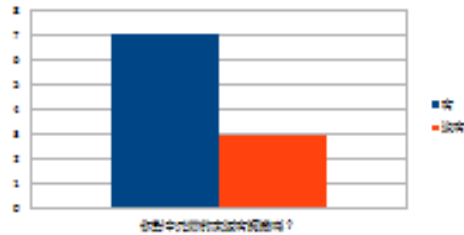
第九題： A. 78 票      B. 6 票      C. 16 票

# D 有效地運用 機構的統計數據 及展示研習成果

# 能利用（不同）圖表鋪陳數據

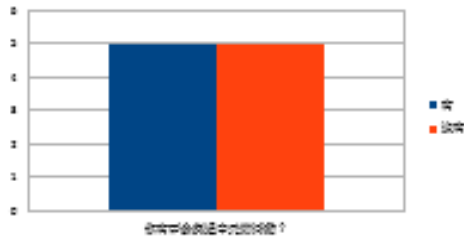
圖4-3 圖表結構

1. 你對涼茶的藥效有認識嗎？

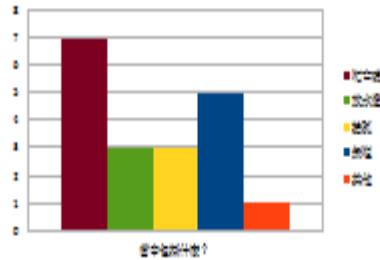


有九成青少年都承認涼茶的藥效，中肯的意見是認涼茶是治肚痛良藥。

2. 你有認識涼茶的藥效嗎？

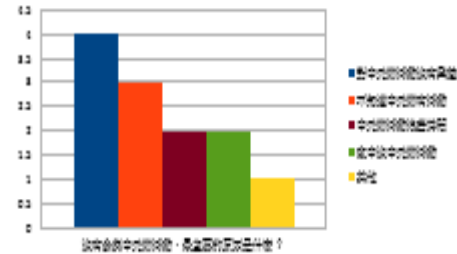


有三分一青少年都承認涼茶的藥效，但仍有會認涼茶的藥效，有三分一青少年都認涼茶的藥效，也不會認涼茶的藥效，有三分一青少年都認涼茶的藥效，也不會認涼茶的藥效。

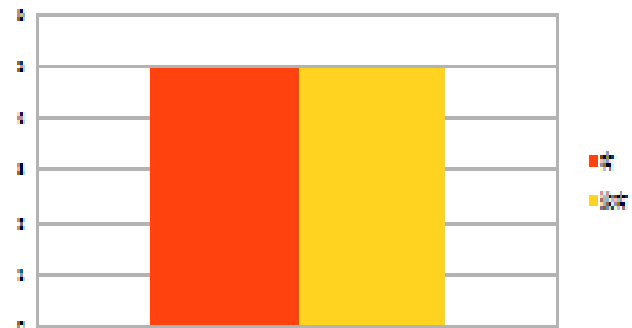


認涼茶藥效的青少年有九成認涼茶是治肚痛良藥，而認涼茶是治肚痛良藥。

3. 你有認識涼茶的藥效，是甚麼的涼茶呢？



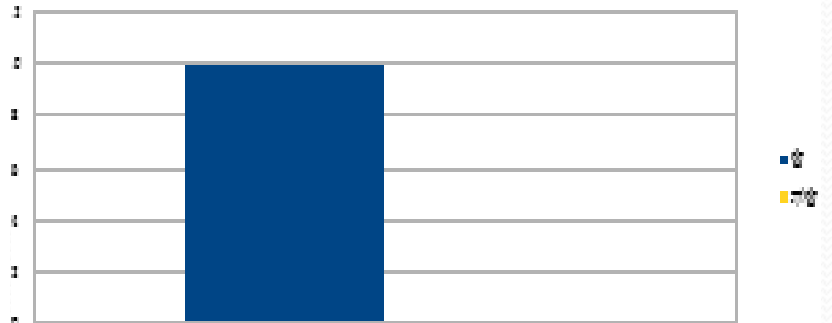
不認涼茶藥效的青少年有八成認涼茶是治肚痛良藥的涼茶，有三分一青少年都認涼茶的藥效。



4. 你對涼茶的藥效有認識，你認涼茶是治肚痛良藥嗎？

有八成青少年認涼茶是治肚痛良藥，在涼茶是治肚痛良藥的涼茶。

6. 以上題，對於治肚痛良藥，你認涼茶是治肚痛良藥的涼茶，也可以認涼茶是治肚痛良藥的涼茶嗎？

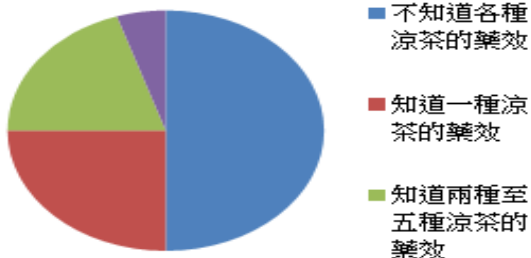


第4題，對於治肚痛良藥，你認涼茶是治肚痛良藥的涼茶，也可以認涼茶是治肚痛良藥的涼茶嗎？

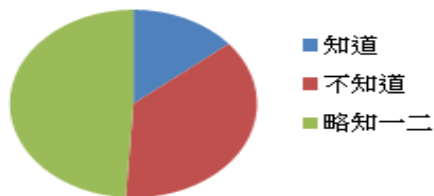
5. 以上題，你認涼茶是治肚痛良藥的涼茶，也可以認涼茶是治肚痛良藥的涼茶嗎？

7. 以上題，你認涼茶是治肚痛良藥的涼茶，你認涼茶是治肚痛良藥的涼茶嗎？

## 你對涼茶的藥效有幾多的認識呢



## 你知道涼茶的歷史嗎？





# 處理資料（問卷數據） 的能力層級



## 分類/分項處理

- 例子1：按焦點問題分類

- ✓ 運用所收集的數據結果——按焦點問題分類，並且每部分作小總結

### 例子2：按受訪者分類

- ✓ 就發展作小總結，以回應焦點問題

# 善用機構的統計數據舉隅/研究報告

消費者委員會政策及研究---研究報告

[https://www.consumer.org.hk/ws\\_chi/keyword-search?keys=](https://www.consumer.org.hk/ws_chi/keyword-search?keys=)



消費者委員會  
CONSUMER COUNCIL

最新資訊 | 消費指南 | 投訴及保障 | 政策及研究 | 關於我們 | 搜尋

焦點： 保潔護膚 抽濕用品 防癩 沐浴露

EN | 簡 登記 (選擇) 快訊 A A A

消費指南

熱門

家庭電器

電子及影音

## 關鍵詞搜尋

開始日期   
例如：06/05/2017

關鍵字

結束日期   
例如：06/05/2017

類型 - 所有類別 -

搜尋

沒有找到搜索結果，請嘗試不同的關鍵字



# 善用機構的統計數據舉隅/研究報告

環境保護署

[http://www.epd.gov.hk/epd/tc\\_chi/top.html](http://www.epd.gov.hk/epd/tc_chi/top.html)



The screenshot shows the homepage of the Environmental Protection Department (EPD) of the Hong Kong Government. At the top left is the EPD logo and the text "香港特別行政區政府 環境保護署". At the top right is the "HONG KONG" logo. Below the logo is a navigation bar with "GOVHK 香港政府一站通", "简体版", and "ENGLISH". To the right of the navigation bar is a search bar with the text "流動 / 無障礙瀏覽版本" and "搜尋 輸入查詢字串". Below the navigation bar is a sidebar with "首頁", "最新消息", and "消息與活動". The main content area features six large buttons with images and labels: "空氣", "環境保育", "環保與規劃", "噪音", "廢物", and "水質".

# 善用機構的統計數據舉隅/研究報告

## 突破機構

<https://www.breakthrough.org.hk/ir/youthdatabank/index.htm>

## 青少年最新研究資料庫

<https://www.breakthrough.org.hk/ir/youthdatabank/ReportList.htm>



### 【青少年研究資料庫】待上載研究報告目錄

(更新日期: 2017-03-01)

	研究報告發 佈出版 日期	研究單位	研究題目	接收報告 日期	預計上載 日期
1	2016-10	民建聯	市民對初中中國歷史科的看法調查結果	2016-10	2017-07-03
2	2016-10	香港小童群益會	香港兒童快樂因素調查(結果撮要)	2016-10	2017-07-03
3	2016-10	香港青年協會, 青年研究中心	青年創研庫 15: 青年對公務員及其所面對挑戰的意見	2016-10	2017-07-03
4	2016-09	九龍社團聯會	市民對教育政策的看法問卷調查結果	2016-10	2017-07-03