## 2023/24 年度中學生統計習作比賽規則

# Rules and Regulations of the 2023/24 Statistical Project Competition for Secondary School Students

## 1. 參賽辦法

i) 統計習作比賽分初級及高級兩組 進行:

初級組:就讀中一至中三或同等

程度課程的學生

高級組:就讀中四至中六或同等

程度課程的學生

- ii) 學生可以以個人身份或與同校同 學組隊參賽。每隊人數不得超過 六人。
- iii) 每位學生只可遞交**一份習作**,但 每間學校的參賽習作數目則沒有 限制。
- iv) 有意參賽的學生須在 <u>2024 年</u> <u>1月19日(星期五)或之前</u>經由 指導老師透過以下連結**填妥網上** 報名表格以完成報名程序。

https://forms.gle/FB8JeytWSV5mMC8Q

指導老師必須確保報名表內資料 的準確性。指導老師將在成功報 名後收到附上報名參考編號的確 認電郵。

v) 所有參賽習作須於 2024 年 2 月 23 日(星期五)或之前,連同報 名確認電郵附上的報名參考編 號,經由指導老師電郵至 spc@hkss.org.hk。請於電郵標題註 明「遞交 2023/24 統計習作比賽 作品」。

> 逾期遞交的申請、未填妥的申請 表格、未經報名或逾期遞交所須 文件的參賽習作,將**不獲受理**。

vi) 為使參賽者進一步了解比賽的詳情,本會將於 2023 年 10 月 21 日 (星期六)上午透過 Zoom 舉行網上簡介講座。

## 1. Entry requirements

i) The Statistical Project Competition (SPC) is divided into two sections:

➤ Junior Section : for students attending

Secondary 1 to 3 or equivalent

➤ Senior Section: for students attending

Secondary 4 to 6 or equivalent

- ii) Students may participate in the SPC either as individual participant or as members of a team from the same school. The number of members in a team is restricted to a maximum of six.
- iii) Each student can submit **one entry only**, but there is no restriction on the number of entries from each school.
- iv) Those intending to participate in the competition must complete the application by submitting the online application form at the link below through their supervising teachers <u>by</u> 19 January 2024 (Friday).

https://forms.gle/FB8JeytWSV5mMC8Q9

Supervising teachers should ensure the accuracy of information filled in the application form. Upon successful application, a confirmation email with Application Reference Number will be sent to the supervising teachers.

v) All entries must be submitted together with the Application Reference Number enclosed in the application confirmation email through the email supervising teachers by to spc@hkss.org.hk before on or 23 February 2024 (Friday). Please mark "Submission of Project for 2023/24 Statistical Project Competition" as the subject of the email.

Late applications, application forms with incomplete information, entries without prior application or late submissions of required documents will **not be considered**.

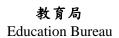
vi) To enable participants to better understand details of the SPC, an **online briefing seminar** via Zoom will be held in the **morning of 21 October 2023** (Saturday).

主辦 Organised by:

協辦 Co-organised by:

贊助 Sponsored by:







## 2. 参賽習作的內容

參賽者在進行統計習作時,應注意下 列各點:

## i) 研究主題

#### > 初級組

初級組參賽者可自行設定研究主題,主題<u>不設限制。</u>參賽者或可參 考下列建議:

- 人口
- 教育
- 環境
- 醫療
- 對外貿易

### ▶ 高級組

高級組參賽者可自行設定研究主題,主題<u>不設限制</u>。研究題材應以探討本港各方面的社會特色(例如房屋、教育和社會福利等)或經濟特色(例如對外貿易、國民收入和經濟結構轉型等)為主。

## ii) 選用的數據

參賽者應選擇切合研究主題的數據作研究。選用的數據須以官方或香港特別行政區政府的刊物或賽者的官方統計資料為主。參賽者可瀏覽政府統計資料為主處網用的政府統計刊物或數據。參賽者站的政府統計刊物或數據。參賽者亦可選用其他刊物作為輔助資料來源。

參賽者不得使用自行搜集的數據。

#### 2. Project contents

In carrying out the project, participants should pay attention to the following points:

#### i) Theme of study

#### > Junior Section

Participants of the Junior Section can set the theme of study by themselves <u>without</u> <u>restriction</u>. Participants may also make reference to the following recommendations:

- Population
- Education
- Environment
- Health Care
- External Trade

#### > Senior Section

Participants of the Senior Section can set the theme of study by themselves <u>without</u> <u>restriction</u>. The theme of study should mainly be related to areas such as Hong Kong's social characteristics (e.g. housing, education and social welfare) or economic characteristics (e.g. external trade, national income and structural changes of the economy).

#### ii) Selection of data sets

Participants should select data relevant to their theme of study for analysis. Major data sources are restricted to official statistics found in publications or websites of official or the Government of the Hong Kong Special Administrative Region. Participants may visit the Census and Statistics Department website (<a href="www.censtatd.gov.hk">www.censtatd.gov.hk</a>) to identify appropriate government statistical publications or data. Participants may also make use of data sets found in other publications as supplementary data sources.

Participants are **not allowed** to use data obtained from self-conducted surveys for the purpose of the project.

## iii) 分析和闡釋數據及陳示結果

參賽者應全面研究和分析所選用 的數據。本會鼓勵參賽者採用簡單 易明的數據分析和統計推理方法, 及盡量避免採用高深的統計方法。

參賽者應將數據背後的事實和訊息充份描述出來,並適當地運用摘要的統計數字和圖表來陳示分析結果。論證和結論亦應以分析結果 為依歸。

#### iv) 設計海報/撰寫報告書

## ▶ 初級組

參賽者須遞交一份海報。海報須 闡述研究主題的主要分析過程及 結果,以及相關的統計定義。

海報必須以中文或英文撰寫,並把內容設計在 A3 大小(420x297mm)的紙張上。

參賽者可運用繪畫或電腦繪圖設 計海報。

#### ▶ 高級組

參賽習作須以報告書形式呈交,報告書標題必須反映所選主題主題、 報告書內須適當地帶出研究主題、清楚闡述分析數據的論證過程及結果,並扼要說明所得的結論。

報告書必須以中文或英文撰寫, 連同封面/底、目錄及附錄在內, 篇幅須介乎於 12 至 24 頁 A4 大 小的紙張。 (Although sample surveys are commonly used in collecting statistical data on social and economic affairs, the proper conduct of all the stages of a sample survey requires theoretical knowledge, experience and substantial resources. Unreliable or biased results may be obtained from sample surveys due to improper design or inadequacy in implementation; and these results may not only be meaningless but actually misleading and harmful. The Society wishes to avoid, as far as possible, this unsatisfactory situation.)

## iii) Analysis and interpretation of data sets and presentation of results

Participants should thoroughly study and analyse the data sets selected. They are encouraged to conduct simple data analysis and statistical reasoning and, as far as possible, to avoid sophisticated statistical methods.

Participants should fully present the facts and information behind the figures. The results of the analysis should be properly presented, using summary statistics or graphical displays as appropriate. Discussions, arguments and conclusions should be based mainly on the analysis of data presented.

#### iv) Preparation of poster/report

#### > Junior Section

Participants must submit a poster. The poster should present the major analytical workings and findings together with the related statistical concepts of the chosen theme.

The poster should be in either Chinese or English. It should be designed on an A3 size paper (420x297mm).

Drawing or computer graphics may be used in designing the poster.

#### Senior Section

The project should be submitted in the form of a report. The title of the report should reflect the chosen theme. In the report, the topic of the study should be properly introduced, reasoning and results should be clearly stated and conclusions should be summarised.

The report should be in either Chinese or English. It should comprise 12 to 24 pages of A4-size paper, including all covers, content page and appendices.

## v) 海報/報告書遞交格式

參賽隊伍須遞交海報/報告書的 **電子版本**。

海報/報告書的數據來源及參考 資料,均須在註腳或參考書目中說 明,否則可能會被**取消參賽資格**。

## ▶ 海報

初級組參賽隊伍須將電子版本的海報儲存為 PDF、PPT/PPTX 或 JPEG 檔案, 連同報名確認電郵附 上的報名參考編號, 經由指導老 師電郵至 spc@hkss.org.hk。

#### > 報告書

高級組參賽隊伍須將電子版本的報告書儲存為 Microsoft Word 文件或非掃描版本的 PDF 檔案,連同報名確認電郵附上的報名參考編號,經由指導老師電郵至spc@hkss.org.hk。

#### vi) 海報/報告書的原創性

參賽者必須親自進行研究探討及 設計海報/撰寫報告書。

指導老師可於確定研究主題和進行分析時提供指導及意見,但不應參與實質的研究工作,包括海報設計/報告書的編寫。一經發現,參賽作品會被降級或被取消參賽資格。

#### vii) 《港區國安法》

參賽作品不應違反《港區國安法》。

#### v) Deliverables of poster/report

Participants must submit **the electronic copy** of the poster/report.

Data sources and other relevant references should be mentioned in footnotes or in the bibliography, or the entry may be **disqualified**.

#### > Poster

Participants of the Junior Section should store the electronic copy of the poster as a PDF, PPT/PPTX or JPEG file and submit the poster together with the Application Reference Number enclosed in the application confirmation email through the supervising teachers by email to spc@hkss.org.hk.

#### > Report

Participants of the Senior Section should store the electronic copy of the report as a Microsoft Word document or a non-scanned PDF file and submit the report together with the Application Reference Number enclosed in the application confirmation email through the supervising teachers by email to <a href="mailto:spc@hkss.org.hk">spc@hkss.org.hk</a>.

#### vi) Originality of the poster/report

The study and compilation of the poster/report should be carried out by the participants themselves.

Supervising teachers may give guidance and advice on identification of study theme and data analysis. However, they should not participate in the actual study work, including the preparation of the poster/report, which will lead to a **downgrade** of the project, or even **disqualification**.

Participants are encouraged to create their own drawings and computer graphics in their poster/report. If other published charts or tables have to be quoted, participants must list the source of the charts or tables quoted in the footnote. Participants must not infringe intellectual property rights of any other party. Plagiarism in whatever manner will form the basis for <u>disqualification</u>.

#### vii) Hong Kong National Security Law

Submissions should not violate the Hong Kong National Security Law.

#### 3. 評審方法

- i) 評審團由從事統計工作的專業人士組成,包括大學教授、專上院校講師、研究人員及政府部門的統計師及研究經理。
- ii)海報將按下列標準評審:
  - a) 準確及扼要地闡述研究主題及分 析數據所得的結論;
  - b) 恰當地使用圖表以表達數據;
  - c) 清晰地表達重要訊息;
  - d) 海報設計的創意;及
  - e) 海報的原創性。
- iii) 報告書將按下列標準評審:
  - a) 恰當地運用描述性統計數字及統 計分析/推理方法;
  - b) 精確闡釋數據及分析結果;
  - c) 清楚而有條理地陳示結果;
  - d) 充份掌握研究主題;
  - e) 充份運用切合主題的數據;
  - f) 行文流暢度;及
  - g) 報告書的原創性。
- iv) 初級組/高級組的評審均分為兩個階段進行。

首先,評審團會根據上述標準評選合 資格的參賽習作,在每個組別中選出 數份習作進入第二階段評選。

在第二階段評選中,入圍習作的參賽者將獲邀出席評審面試。評審團經審議後,選出每個組別的優勝隊伍。評審 團將由大學教授及政府統計師組成。

面試將暫定於 2024 年 4 月 27 日 (星期六)舉行。只有人圍習作的參賽者獲邀出席。若參賽者於 2024 年 4 月 19 日(星期五)前仍未獲邀參加,則可視作落選論。

#### 3. Adjudication

- The adjudication panel will comprise professionals working in the field of statistics, including professors, academics from tertiary institutions and statisticians and research managers from government departments.
- ii) The posters will be assessed on the basis of the following criteria:
  - a) Ability to present the theme and findings in a precise and concise manner;
  - b) Appropriateness of the graphs for the data;
  - c) Clarity of the key messages conveyed;
  - d) Creativity of the design; and
  - e) Originality of the poster.
- iii) The reports will be assessed on the basis of the following criteria:
  - a) Appropriate use of descriptive statistics and statistical analysis/reasoning;
  - b) Sound interpretation of data and analyses;
  - c) Clear and neat presentation of findings;
  - d) Good grasp of the theme of study;
  - e) Use of relevant and adequate data sets;
  - f) Fluency of language; and
  - g) Originality of the report.
- iv) The adjudication will comprise two stages for both the Junior and Senior Sections.

Firstly, the adjudicators will examine each project that is qualified for competition according to the above-mentioned criteria. A number of projects in each Section will be shortlisted for the second stage.

In the second stage, participants of shortlisted projects will be invited to attend an adjudication interview. After the assessment by the adjudicators, the winning entries in each Section will be chosen. The adjudication board will consist of professors and government statisticians.

The interview is tentatively scheduled for **27 April 2024 (Saturday)**. Only participants of shortlisted projects will be invited to the interview. Those who are not invited for the interview on or before **19 April 2024 (Friday)** may assume that their applications are unsuccessful.

#### 4. 獎項

初級組及高級組優勝隊伍的獎項如下:

恒生指數有限公司 初級組/高級組冠軍

書券(價值港幣一千八百元)、獎杯及 獎狀

恒生指數有限公司 初級組/高級組亞軍

• 書券(價值港幣一千二百元)、獎杯及 獎狀

恒生指數有限公司 初級組/高級組季軍

書券(價值港幣六百元)、獎杯及獎狀

## 優異獎(多名)

每隊優勝隊伍各得書券(價值港幣三百元)及獎狀

此外,比賽另設以下特別獎項:

恒生指數有限公司 初級組/高級組最佳 指數應用獎

書券(價值港幣一千二百元)及獎狀

<u>香港城市大學管理科學系 初級組/高級</u>組最佳統計圖表獎

• 書券(價值港幣六百元)及獎狀

得獎隊伍的指導老師及學生將會獲邀參 觀政府統計處總部。

另外,參賽者及指導老師均會獲贈嘉許狀 /參與證書。

香港統計學會保留出版、展出及轉發參賽 作品、以及於簡介講座及頒獎典禮期間拍 攝的照片和影片的權利。

#### 4. Prizes

For the Junior and Senior Sections, the prizes for the winning teams are as follows:

<u>Hang Seng Indexes Company Limited First Prize for</u> the Junior Section / the Senior Section

 Book coupon of HK\$1,800, Trophy and Certificates of Merit

<u>Hang Seng Indexes Company Limited Second Prize</u> for the Junior Section / the Senior Section

 Book coupon of HK\$1,200, Trophy and Certificates of Merit

<u>Hang Seng Indexes Company Limited Third Prize</u> for the Junior Section / the Senior Section

 Book coupon of HK\$600, Trophy and Certificates of Merit

## Distinguished Prizes

• Book coupon of HK\$300 and Certificates of Merit for each winning team

Also, there will be special awards as follows:

<u>Hang Seng Indexes Company Limited Prize for the Best Index Application for the Junior Section / the Senior Section</u>

 Book coupon of HK\$1,200 and Certificates of Merit

Department of Management Sciences, the City University of Hong Kong Prize for the Best Graphical Presentation of Statistics for the Junior Section / the Senior Section

• Book coupon of HK\$600 and Certificates of Merit

Supervising teachers and students from the winning teams will be invited to a tour at the Headquarters of the Census and Statistics Department.

In addition, Certificates of Appreciation/Participation will be awarded to participants and supervising teachers.

The Hong Kong Statistical Society reserves the right to publish, exhibit and re-disseminate the submitted reports, and photos and videos taken during the Briefing Seminar and Prize Presentation Ceremony.

#### 5. 公布評審結果及頒發獎項

評審結果將於 <u>2024 年 5 月</u>經由學校通知 得獎者。頒獎典禮將於 <u>2024 年 6 月</u>舉行, 日期及地點將會稍後公布。

## 6. 查詢

2023/24 中學生統計習作比賽的詳細資料已上載於本會網站(<u>www.hkss.org.hk/spc</u>)。如有任何查詢,請聯絡比賽籌委會成員沈梓軒先生(電話: 2582 4485;電郵: **spc@hkss.org.hk**)。

## 5. Announcement of results and presentation of prizes

Participants of winning entries will be informed of the results in <u>May 2024</u> via their schools. The prize presentation ceremony will be held in <u>June 2024</u>. The date and venue of the ceremony will be announced later.

#### 6. Enquiries

Details of the 2023/24 SPC can be found on the website of the Society (www.hkss.org.hk/spc). For any enquiries, please feel free to contact Mr. Hinz SHUM, member of the Organising Committee for the Competition (Telephone No. : 2582 4485, Email: spc@hkss.org.hk).

最後更新: 2024 年 1 月 12 日 Last Updated: 12 January 2024