



# *Maximizing Entry Survey Results to Predict and Support Academic Success*

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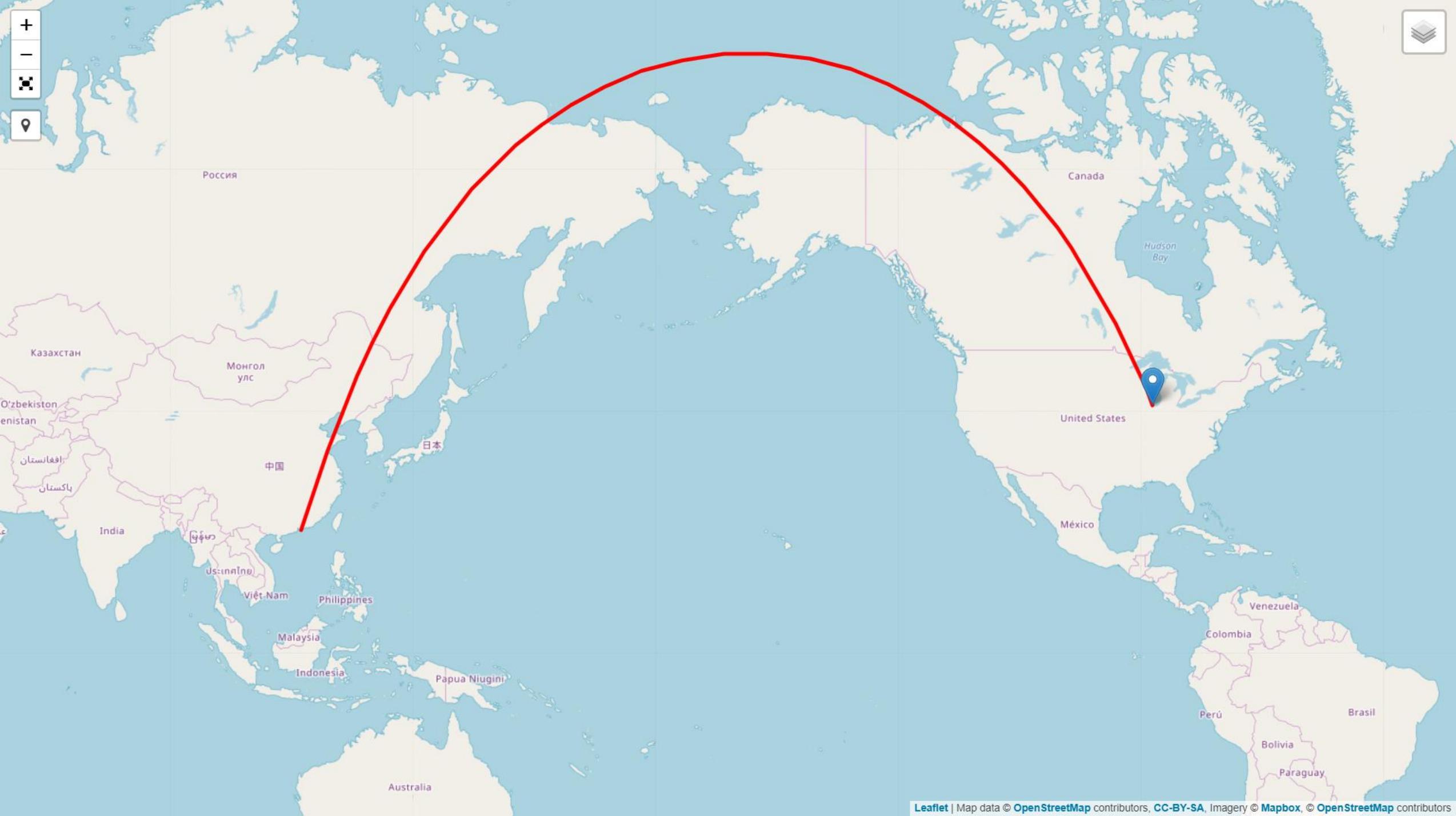
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學能提升研究中心  
Centre for Learning Enhancement And Research



Educational  
Development  
Centre



School classroom



University lecture hall

# Questions

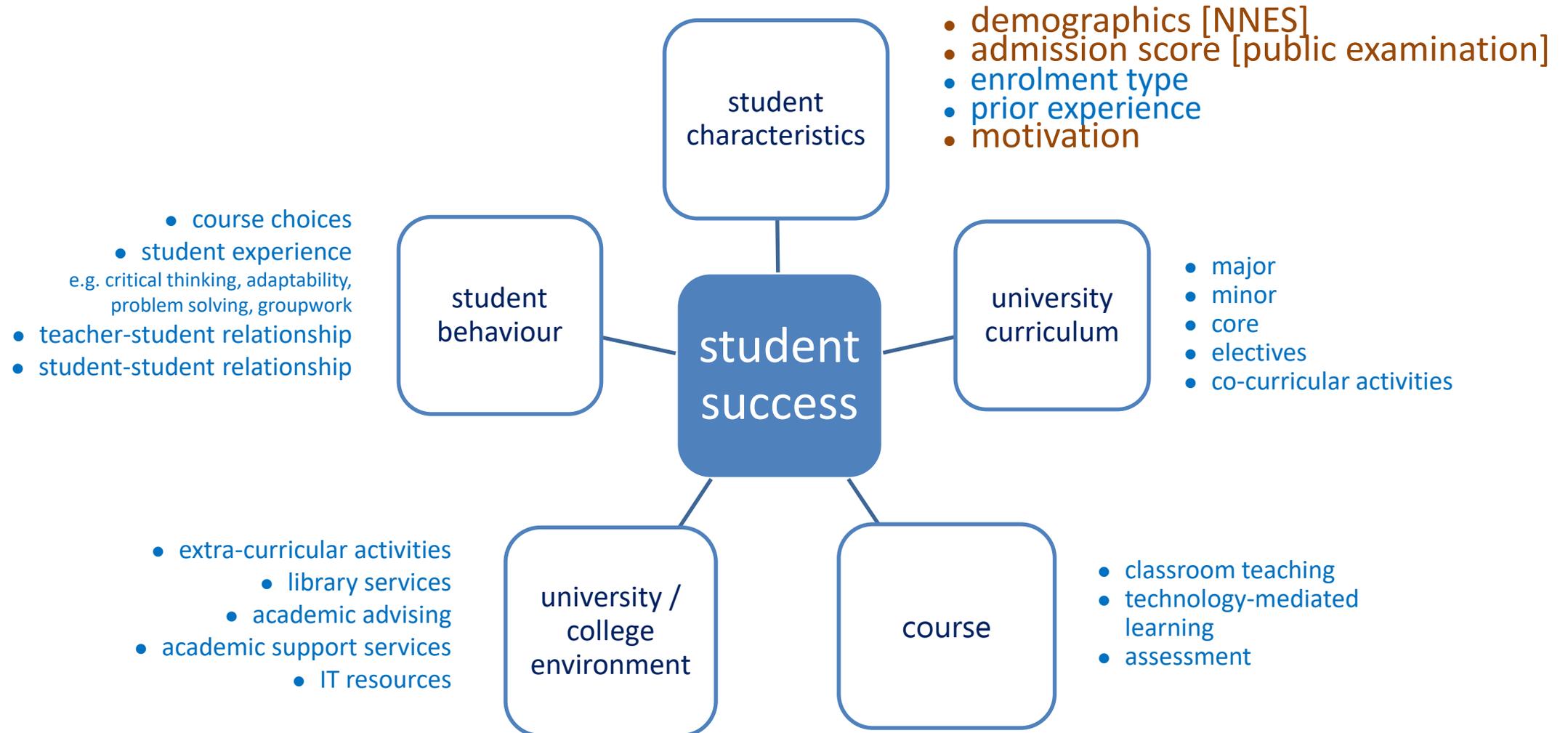
- What are your organization's **key predictors of academic success in the first year** of university?
- **How** do you **find out** how well students are prepared for university study?
- **How** do you **support** the **students** who **may need it the most**?

# Outline

- Background of the study
  - Public examination (Hong Kong Diploma Secondary Education) for university admission in Hong Kong
- Methodology: data collection
  - Public examination
  - Entry survey
- Findings
- Discussion
- Conclusion and recommendations



# Factors that impact on student success



# Data collection

## Existing data

- student records
  - grades
  - programme/courses taken
  - co- and extra-curricular activities
  - **admissions scores**
- programme document
- institutional surveys
- LMS / Blackboard
- library use

## Additional data

- **surveys**
- interviews
- focus groups

Survey and Behavioural  
Research Ethics Committee  
reference no.  
3210064/8408110



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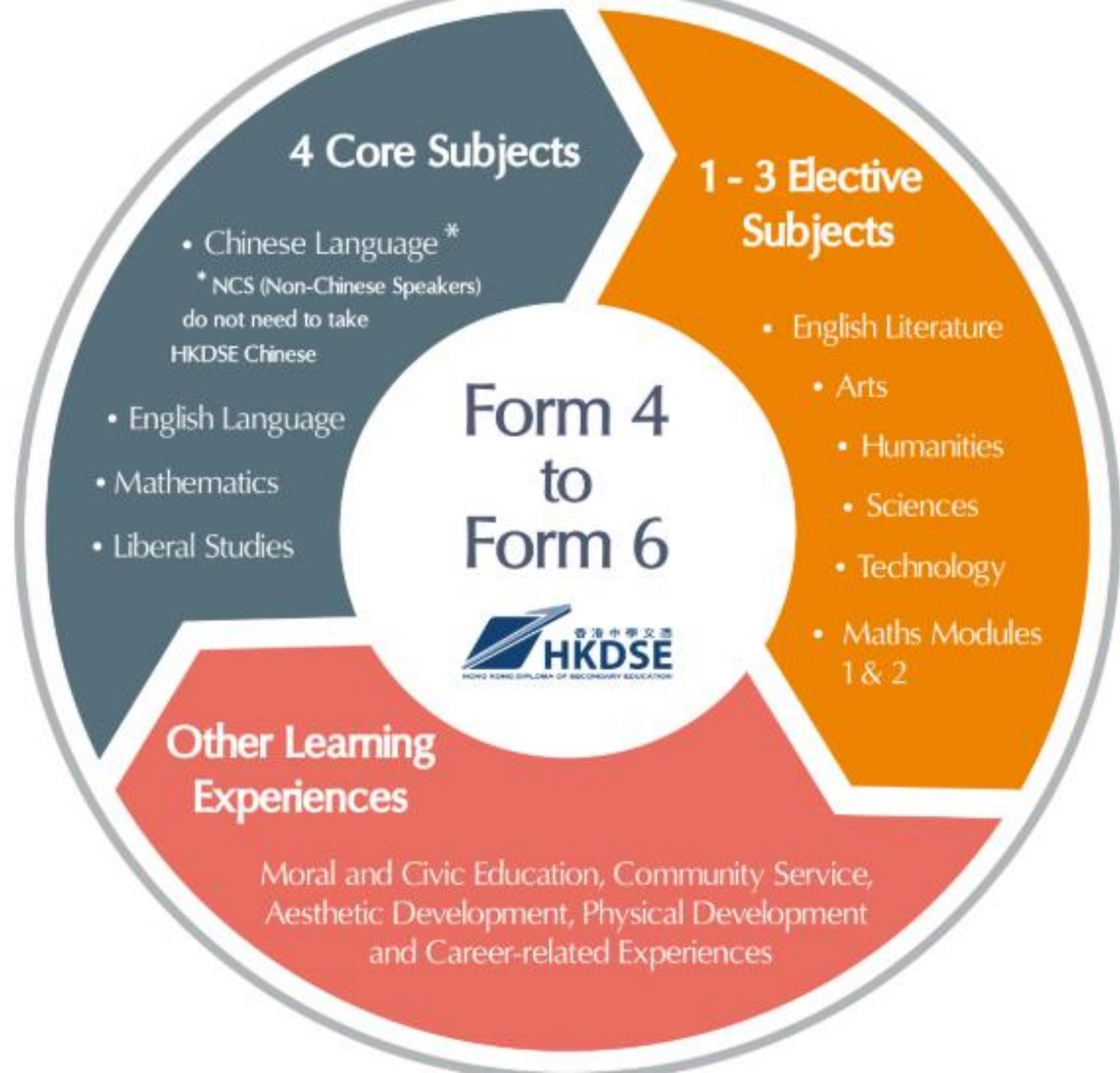


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# Hong Kong senior year education



# DSE public examination



# Enrolling to university

Applicants' User Guide | FAQ | Statistics | News | Events | Useful Material | 中文 | A A A | 🔍

無障礙網頁 Web For All | IMA MEMBER 2016 BEST IN CLASS | LOG ON my JUPAS Account

About JUPAS / Eligibility / Application Procedures & Information / Results of Application / Calendar

About JUPAS Participating-institutions | Programmes Offered | Contact Information

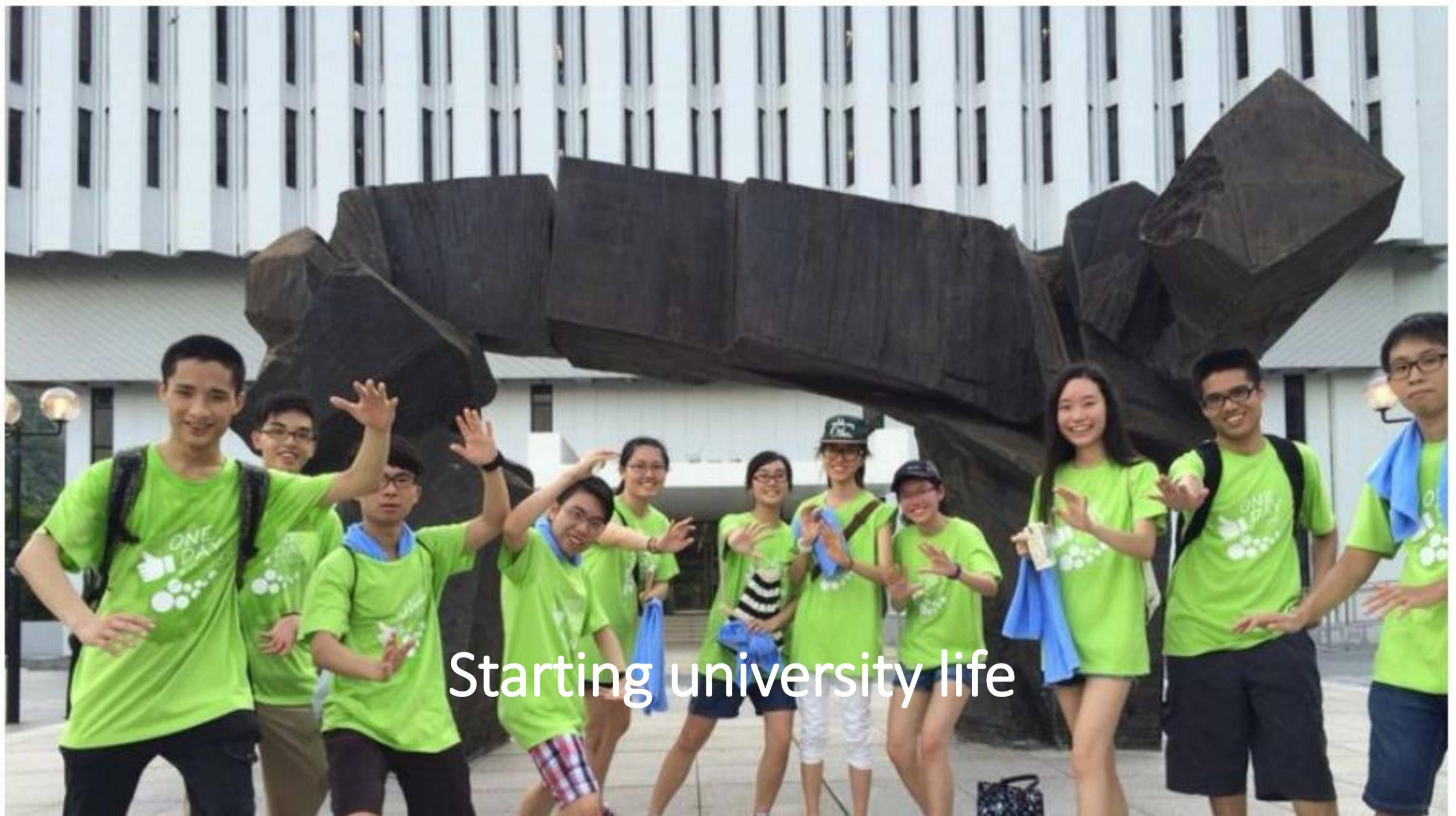
Participating-institutions:

CityU | CUHK | HKUST | HKU | ...

**Joint University Programmes Admission System (JUPAS)**  
大學聯合招生辦法

[Updating of Programme Choices](#)  
(before Release of HKDSE Examination Results)  
**DEADLINE:**  
**22 May 2019 (11:59 pm)**

CALENDAR | LOG ON | FAQ



Starting university life



# Factors contributing to academic success

- **prior academic achievement,**
- satisfaction with courses,
- effective **study approaches,**
- good grade point average in **the first semester,**
- good **time management,** and
- linguistic resources.



(Harrington & Roche, 2014; Montmarquette *et al.*, 2001; Nam *et al.*, 2014; Valadas, Almeida & Araújo 2017)

# Factors contributing to students considering withdrawal

- few opportunities for them to have direct contact with staff or peer-to-peer interactions,
- a heavy assessment load, and
- unfamiliarity with new teaching methods.

(Webb & Cotton, 2018)

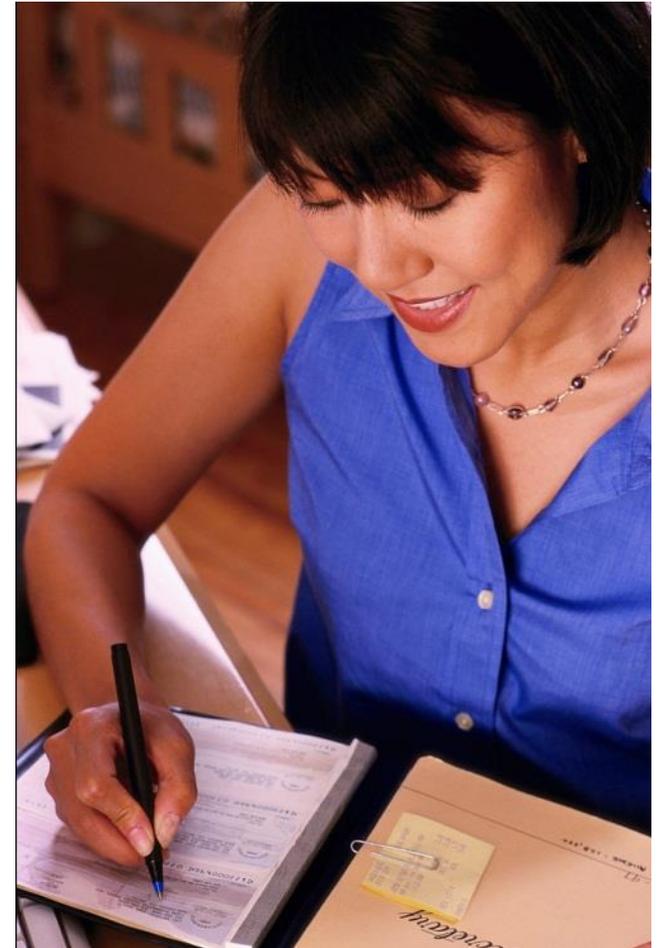


# Challenges of the first-year experience

- Successful transition from school

(Booth, 2001; Kuo *et al.*, 2004; Hurdato *et al.*, 2007; Samson & Granath, 2004; White, 2007)
- Varying levels of English proficiency
  1. understanding of technical vocabulary,
  2. understanding lectures for NNES,
  3. proficiency in English academic writing, and
  4. meeting institutional and disciplinary requirements.

(Evans and Morrison, 2011)



# Methodology of the study

Data were collected in 2017:

- **Ethics clearance** from the university.
- **Admission scores** of the first-year student intake of the undergraduate programs is based on the public examination, Hong Kong Diploma of Secondary Education (HKDSE).
- **Entry survey** that captured the first-year students' personal particulars and university life, and self-assessment and expectations for university education.

# Data processing in HKDSE (1)

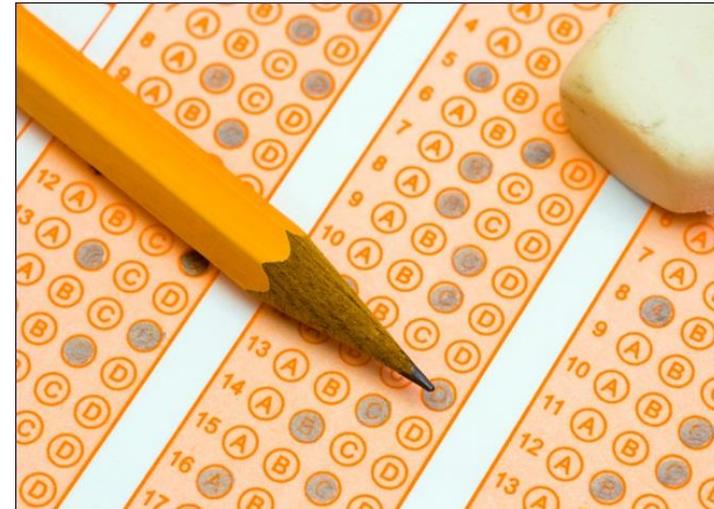
- HKDSE scores across the four subject areas: Chinese, English, mathematics and liberal studies.
- Scores can range from 4 to 28, with each core subject contributing up to seven points, as follows:
  - Level 1 scores 1,
  - Level 2 scores 2,
  - Level 3 scores 3,
  - **Level 4 scores 4,**
  - **Level 5 scores 5,**
  - **Level 5\* scores 6, and**
  - **Level 5\*\* scores 7 points.**
- Data collected from <https://cdcf.ugc.edu.hk/cdcf/statEntry.action?language=EN>) by the University Grants Committee.

# Data processing in HKDSE (2)

- Level 5 demonstrates comprehensive knowledge and understanding of the subject and ability to analyse, synthesize and evaluate information from a wide variety of sources, as well as to communicate ideas clearly and logically.
- The **HKDSE English** grade is an indicator of students' abilities in the use of English that assesses their **abilities in reading, writing, listening and speaking**.
- **Level 4** attained in **English in HKDSE** is equivalent to the International English Language Testing System (**IELTS**) **band 6** score.
- The data have been **aggregated by program** for each **faculty** (Arts, Business, Education, Engineering, Law, Medicine, Sciences, Social Sciences).

# Institution-wide entry survey

- 3,927 students entering the university in 2017.
- 2,764 responded to the entry survey
- 2,383 responded to the items on English proficiency (a 60.7 percent response rate; including local, mainland Chinese and international students).
- Items related to English proficiency reported in the study:
  1. 'the use of English vocabulary',
  2. 'listening to English',
  3. 'speaking in English',
  4. 'writing in English', and
  5. 'reading English texts'.
- Considering their self-perceived ability, rate items with a five-point Likert scale:
  - 1 as strongly disagree, and
  - 5 as strongly agree.



# Questions

- Are combined scores for two languages, mathematics and liberal studies different for students admitted to different faculties (Arts, Business, Education, Engineering, Law, Medicine, Sciences, Social Sciences)?
- Do scores for English follow the same pattern as the combined scores (4 core subjects) to different faculties?
- Do self perceptions on English proficiency in the entry survey match performance in the public examination?
- Are those that most need support (weak in English proficiency) also the most interested?

# What would YOUR answers be???

- Are combined scores for two languages, mathematics and liberal studies different for students admitted to different faculties (Arts, Business, Education, Engineering, Law, Medicine, Sciences, Social Sciences)?

## **Total HKDSE scores in four core subjects by faculty.**

- Do scores for English follow the same pattern as the combined scores (4 core subjects) to different faculties?

## **HKDSE English score by faculty.**

- Do self perceptions on English proficiency in the entry survey match performance in the public examination?

## **Student perception of English literacy.**

- Are those that most need support (weak in English proficiency) also the most interested?

## **Student interest in participating in English-enhancement activities.**

# Total HKDSE scores in four core subjects by faculty [an example of faculty of arts]

Data source from University Grant Committee at

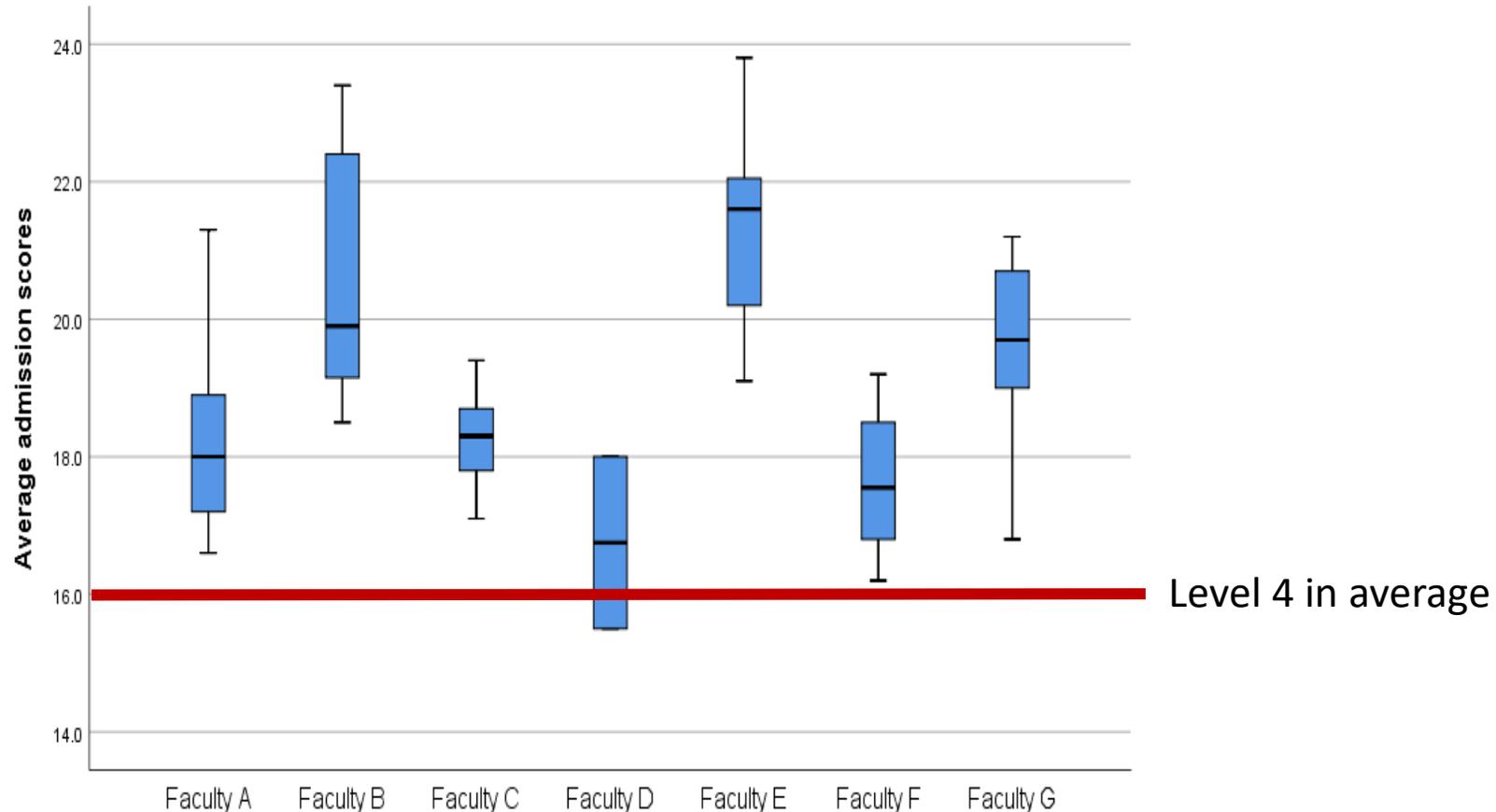
<https://cdcf.ugc.edu.hk/cdcf/statEntry.action>

The data have been aggregated by program for each faculty.

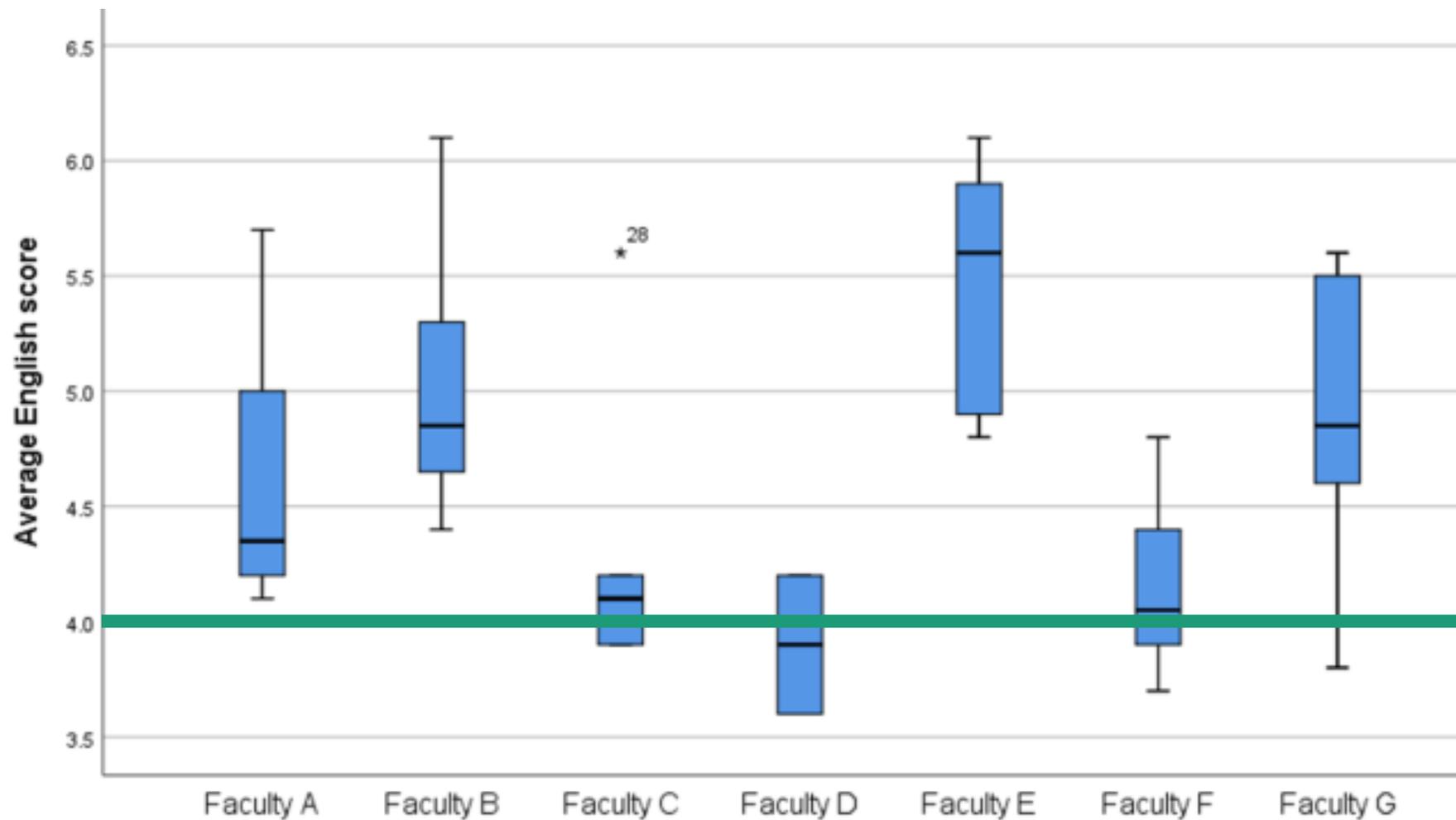
| faculty | type       | <a href="https://cdcf.ugc.edu.hk/cdcf/statEntry.action">https://cdcf.ugc.edu.hk/cdcf/statEntry.action</a> | 4 score subjects | english |
|---------|------------|---|------------------|---------|
| arts    | arts       | B.A. in Music   | 19.3             | 5.2     |
| arts    | arts       | B.A. in Cultural Management   | 17.2             | 4.2     |
| arts    | arts       | B.A. in Fine Arts   | 16.6             | 4.5     |
| arts    | humanities | B.A. in Cultural Studies  | 18               | 4.1     |
| arts    | humanities | B.A. in History   | 18               | 4.3     |
| arts    | humanities | B.A. in Philosophy  | 18               | 4.3     |
| arts    | humanities | B.A. in Anthropology  | 17.3             | 4.1     |
| arts    | humanities | B.A. in Religious Studies   | 16.9             | 4.2     |
| arts    | humanities | B.A. in Contemporary China Studies  | 16.8             | 4.4     |
| arts    | languages  | B.A. in Translation   | 21.3             | 5.7     |
| arts    | languages  | B.A. in Chinese Language and Literature   | 19.9             | 4.3     |
| arts    | languages  | B.A. in Japanese Studies  | 18.9             | 4.9     |
| arts    | languages  | B.A. in English   | 18.6             | 5.7     |
| arts    | languages  | B.A. in Linguistics   | 18.4             | 5       |

# Total HKDSE scores in four core subjects by faculty

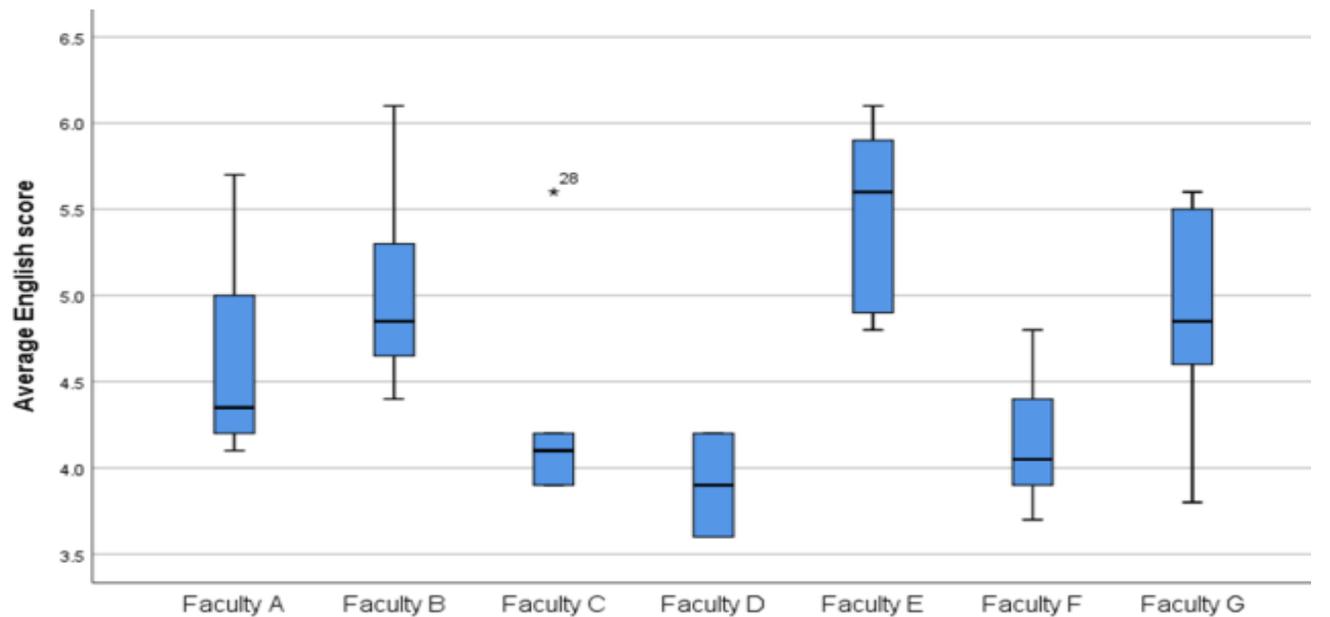
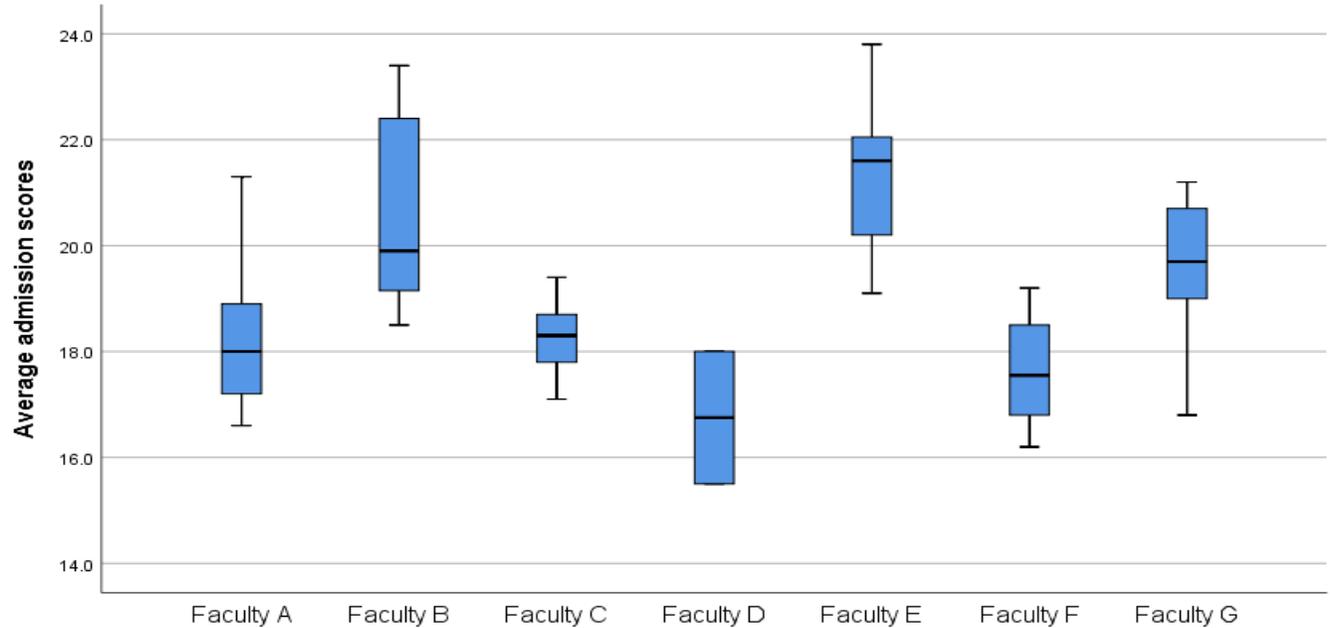
The data have been aggregated by program for each faculty. The black bar in the boxplot represents the 50th percentile (or median) score for each faculty, with the top and bottom of the blue box representing the 25th and 75th percentiles, respectively.



# HKDSE English scores by faculty

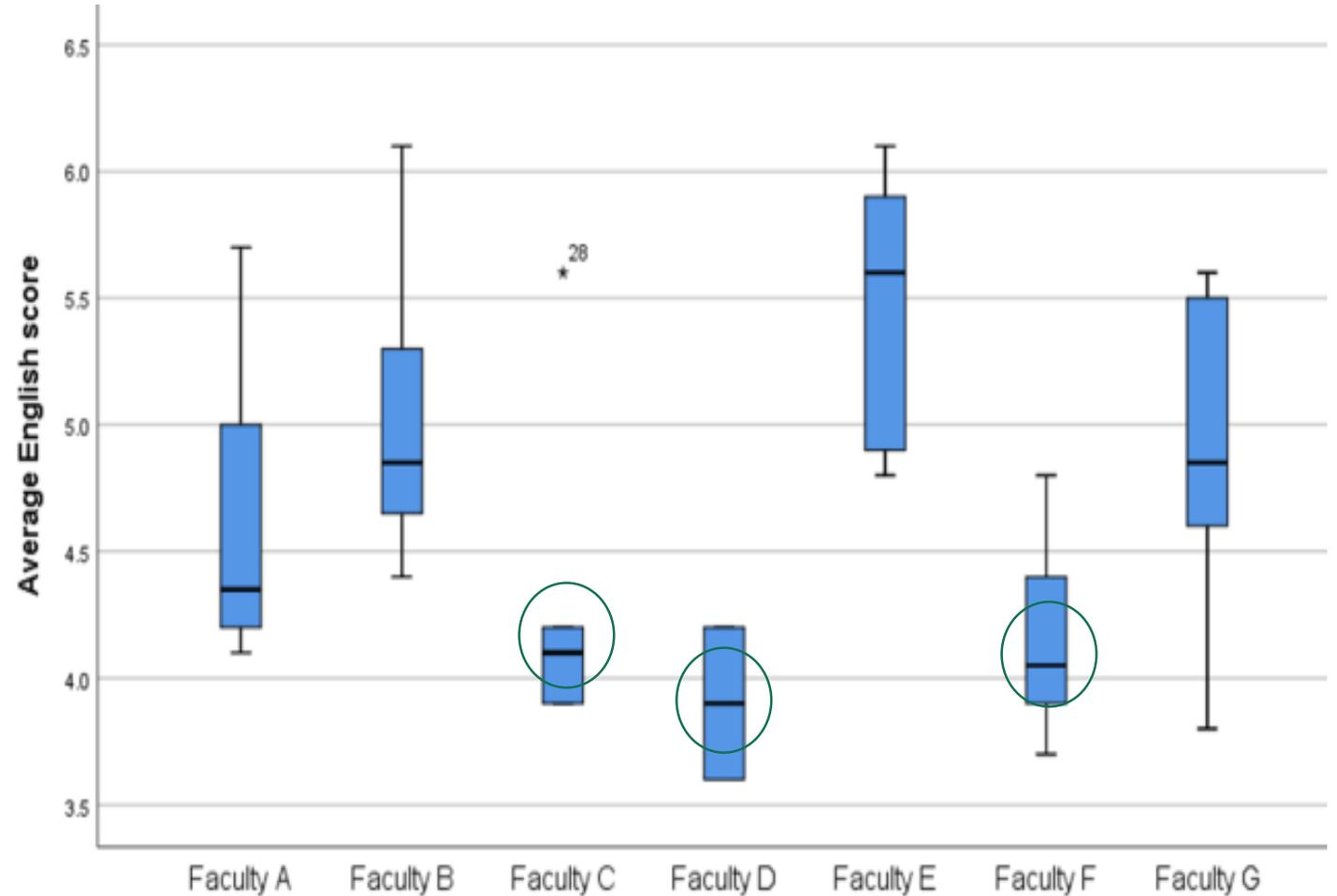


# Consistency between core subjects and English by faculty



# Faculties need more support in English

Half of the students from Faculties C, D and F scored Level 4 or below in the HKDSE English assessment. This implies that these faculties need to have more support for enhancing students' English proficiency.



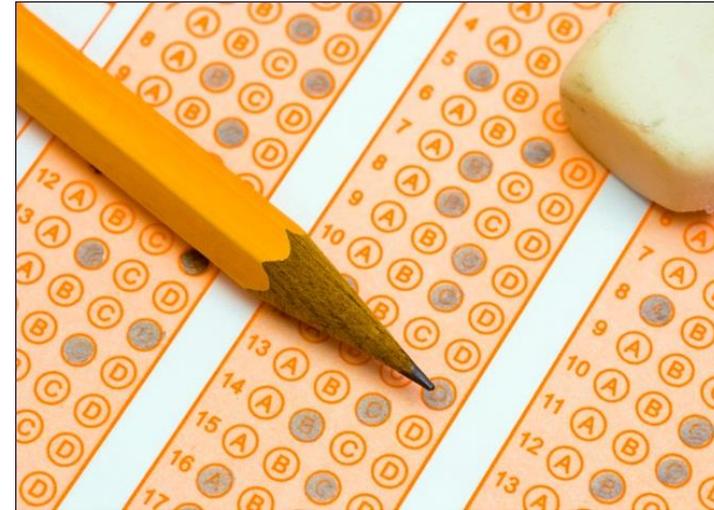
# Findings

- Total HKDSE scores in four core subjects by faculty.
- HKDSE English score by faculty.
- Student perception of English literacy.
- Student interest in participating in English-enhancement activities.

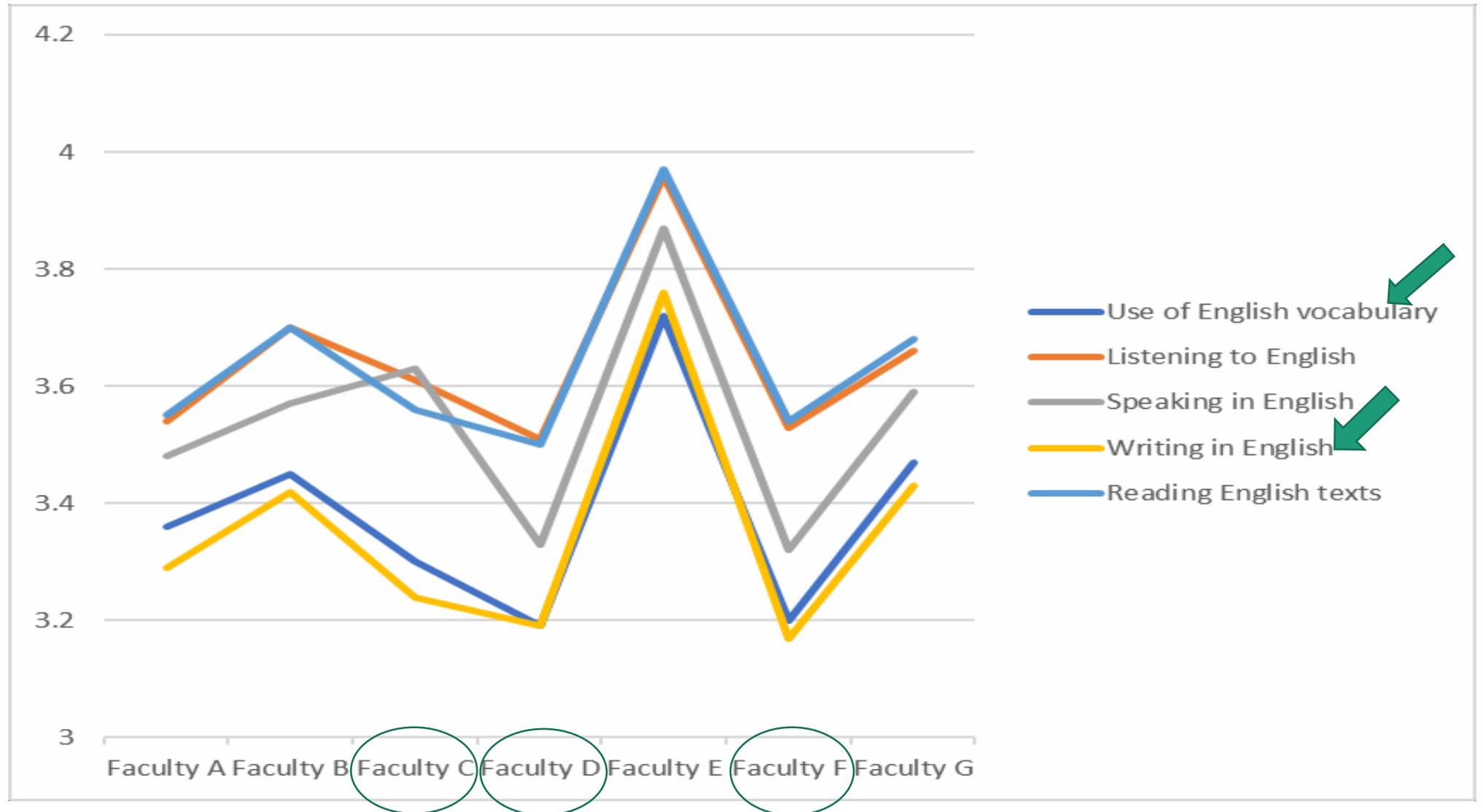


# Self-perception on English in the entry survey

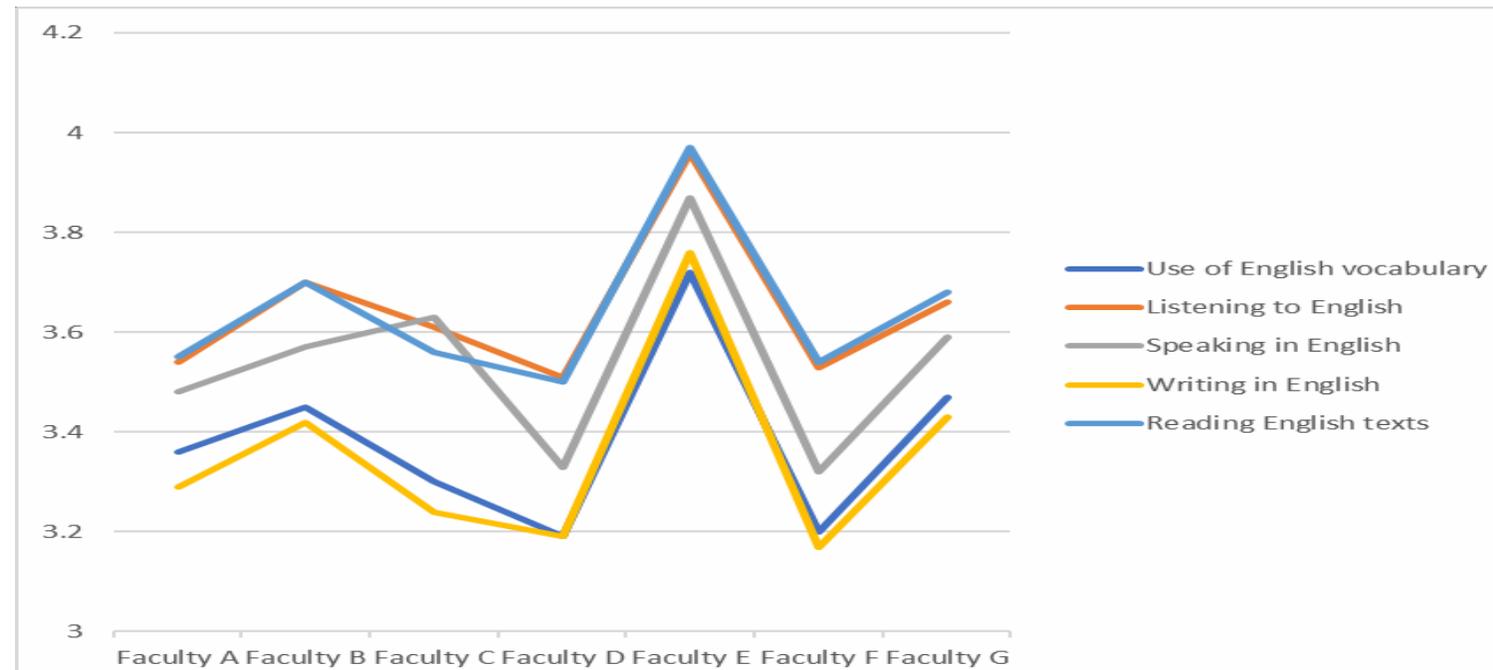
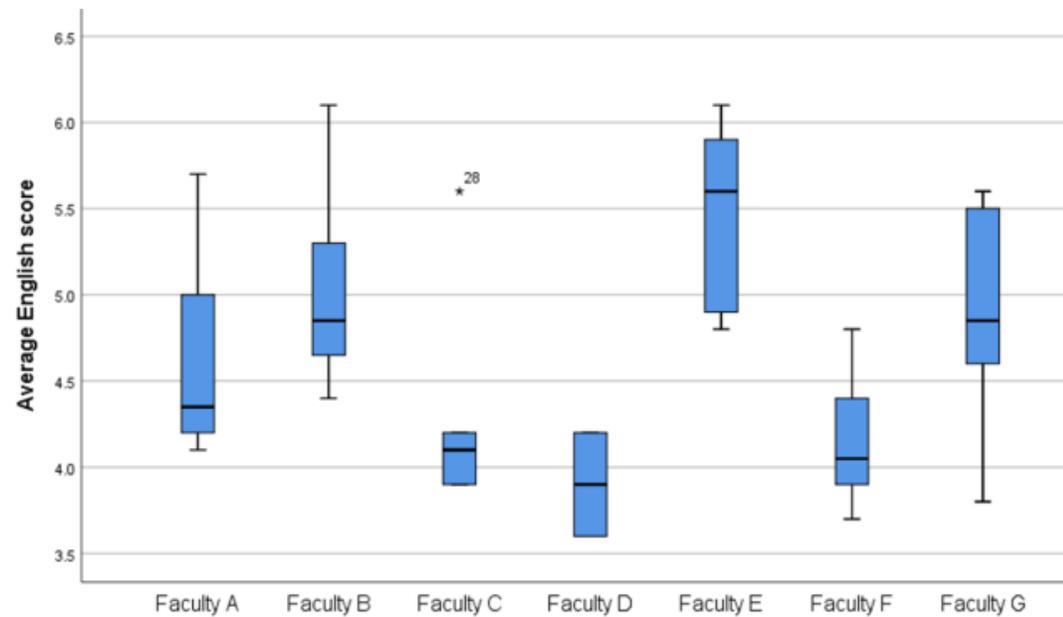
- Items related to English proficiency reported in the study:
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- Considering their self-perceived ability, rate items with a five-point Likert scale:
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# Student perception of English literacy

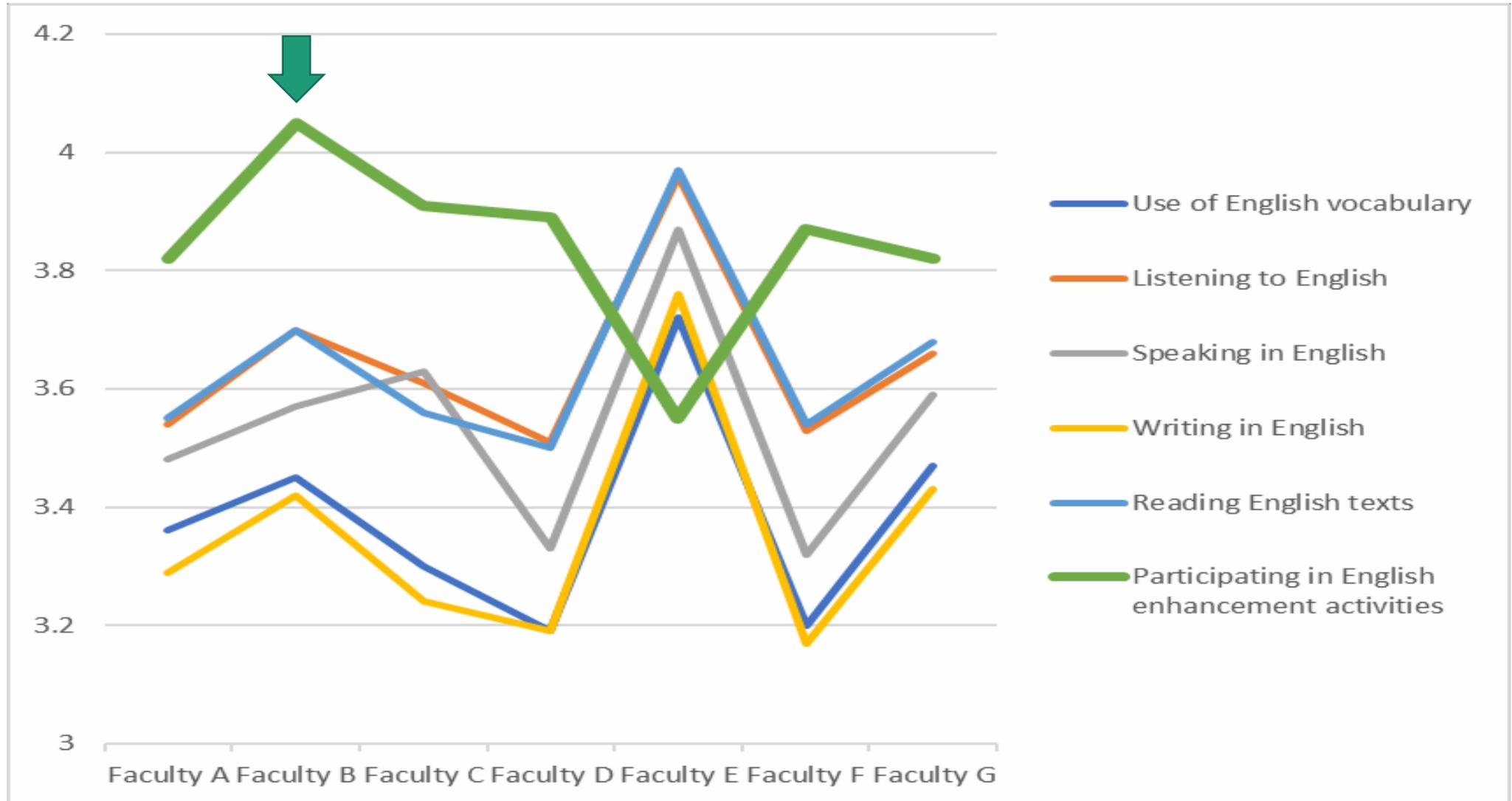


Consistency  
between  
English score  
(HKDSE) and  
self-rated  
English  
literacy in  
entry survey



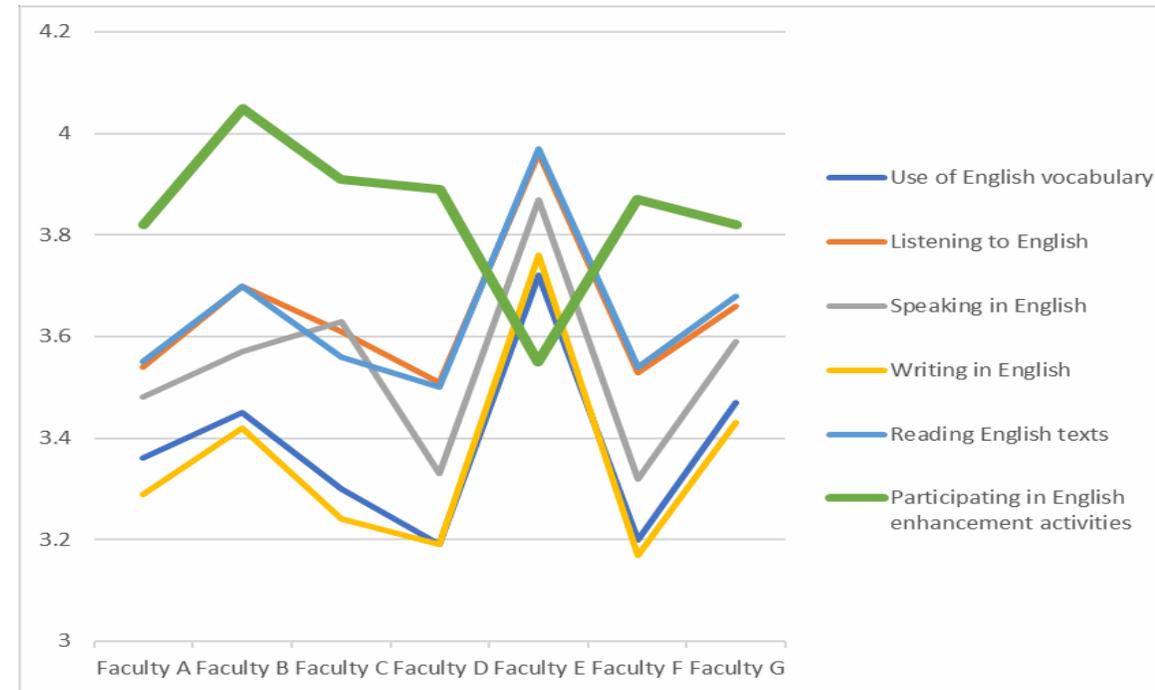
Which faculty of students are interested in English support?

# Student interest in participating in English-enhancement activities



# Student interest in participating in English-enhancement activities

- Students from Faculty B, indicating the highest readiness to participate in English-enhancement activities (even though their existing abilities are high compared with most other faculties).
- More **guidance** on academic writing tasks would be useful, particularly for students in **Faculties C, D and F**. Based on the data collected, **academic writing** may require the **closest attention** for language centres and faculties that offer English-enhancement activities in the university.



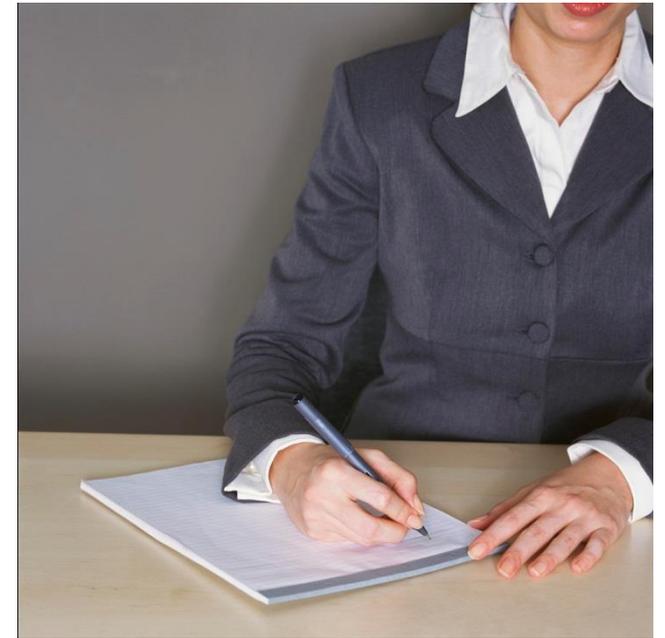
# Discussion (1)

- Despite students with **high admission scores** often being attracted to **medical programs**, selection of medical students needs to be **balanced** with **intellectual ability** to **communicate effectively** with peers and patients (Mercer and Puddey, 2011).
- **Scholastic characteristics** in **engineering** programs indicate that **proficiency in mathematics** is considered an essential indicator of success in the program (Nam *et al.*, 2014).



## Discussion (2)

- Regardless of the major subject studied, **poor proficiency in English significantly** affects students' **ability to understand content** in lectures and increases their **difficulty in taking notes** and **participating in discussions** with peers to solve problems (Olanipekun, 2013).
- It is essential to provide support to students so that they have a good foundation of English proficiency; they should be encouraged to pay equal attention to **language proficiency, mastery of scientific concepts** and **solving complex formulae** to become better engaged in their courses (Hurst, 2015).



# Discussion (3)

- Student **attitudes** and **motivation** are crucial for second-language learning.
- Language support often takes the form of **credit-bearing** English for Academic Purposes (EAP) courses.
- Alternative **language enhancement options**: Independent Learning Centre, language courses offered in Colleges
- Activities in a **self-access** mode beyond class time in order to cope with the linguistic demands of their university study, e.g. MOOCs



# Discussion (4)

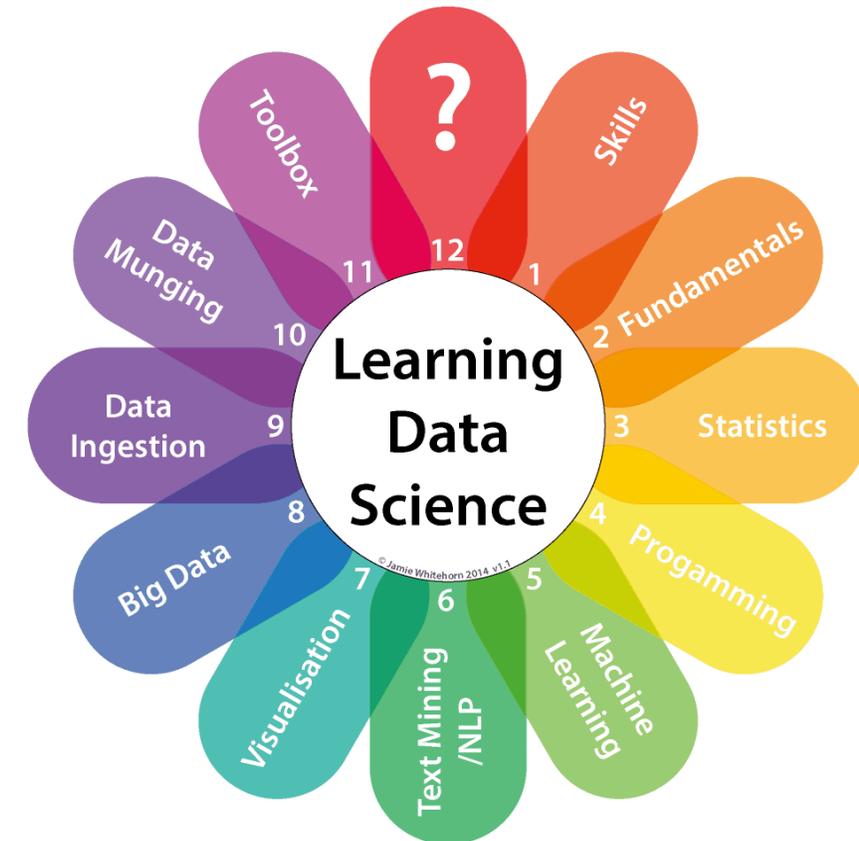
- Concerns about **teacher preparedness** for teaching **NNES university students** have been raised (Trent, 2017).
- **New teachers**, especially those recruited **internationally**, should be made aware of the educational background of students in Hong Kong so that they pay attention to **how fast they speak** to their NNES students and to students' understanding of **technical vocabulary** in the field of study.



# Conclusion and recommendations

## 1. Data

- Universities, faculties and programs of study can examine the **available data** for their own students and **offer targeted activities** for the **greatest areas of need**.
- Data may suggest that at the university level, **greater support for writing in English** may be beneficial, while **particular faculties or programs** of study may identify different **specific areas of need**.
- Because studying in university is likely to place greater demands upon students' language abilities, management and learning skills, consider administering intake surveys in which **students self-assess their abilities several weeks after actual university study has begun**.
- For the same reason, solicit (or re-solicit) student **interest in participating in language-enhancement and other activities** shortly after their studies have begun.



# Conclusion and recommendations

## 2. Student awareness

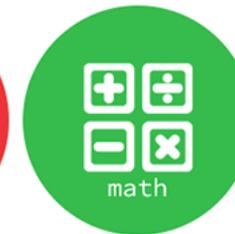
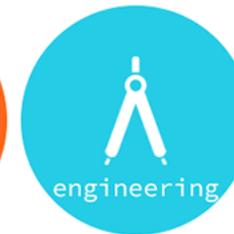
- **Raise student awareness of a range of skills** that can help them in their **university studies**, such as **planning, goal setting, and study skills**, in addition to **language-enhancement activities**.
- In the age of data analytics, find mechanisms to review data available on students to suggest individualized options.
- Even if **participation in support programs is voluntary**, sharing **individualized feedback** with students can help them to make more informed choices as to how to best **invest their time** and effort to **build their own skill set**.



# Conclusion and recommendations

## 3. Support for students and staff

- **More resources and support** may be needed, with more channelled to those students in **programs with low admission** scores in English to support their transition to English-medium higher education.
- **Teachers** of subjects, programs of study and within faculties can benefit from both **better understanding of the students** and **targeted training in areas** most likely to help their students to learn more effectively and efficiently.





Q&A

# Questions

- Is the situation similar or different in your context?
- What methods do you use to support students?
- How do you reach the students most likely to benefit from support?



# Acknowledgement

**Enhancing learning outcomes for students through a data-driven review of the four-year curriculum in UGC-funded programs**



Funded by UGC T&L related projects in the 2016-19 triennium

