THE TOP THREE LOCATIONS OF ENGLISH LEARNING CENTER AMONG 27 LOCATIONS IN HONG KONG

BACKGROUND

- English is very important in Hong Kong.

- Parents in Hong Kong pay lots of attention to build up the English ability of their kids.

- Many of them send their kids to English Center to learn English when their kids reach as early as three years old.

- The number of English learning center for early age students have been growing for the last decade.

BUSINESS PROBLEM

- Babington Education has been established for 11 years and have opened 26 English learning centers around different part of Hong Kong.

- They are planning to open their 27th English learning center and want to use a quantitative approach to come up with the top three area locations in Hong Kong among the 27 options provided by Babington Education.

DESCRIPTION OF THE DATA

- 2015 District Council Ordinary Election Constituency Boundaries dataset
  - the boundary geo data in Json format

- 2016 Population By-census Statistics (By District Council Constituency Area

- 27 locations provided by Babington Education

- FourSquare API

HOW TO USE THE DATA TO SOLVE THE BUSINESS PROBLEM

- 2015 District Council Ordinary Election Constituency Boundaries dataset
  - Define the boundaries of the 431 District Council Constituency Area in Hong Kong.

- 2016 Population By-census Statistics (By District Council Constituency Area
  - Incorporate population data and socio-economic characteristics of the Hong Kong population data into our analysis in determine the new center area

- 27 locations provided by Babington Education
  - Used to find the latitude and longitude of the location

- FourSquare API
  - Used to find the the number of nursery school for a specific location

METHODOLOGY

- According to the Babington Education, the best location should have more the greatest number of nursery schools within the 500 meters of the locations.

- If the locations obtain the same number of nursery schools, the better locations should be determined by the population under age 15 of the location.
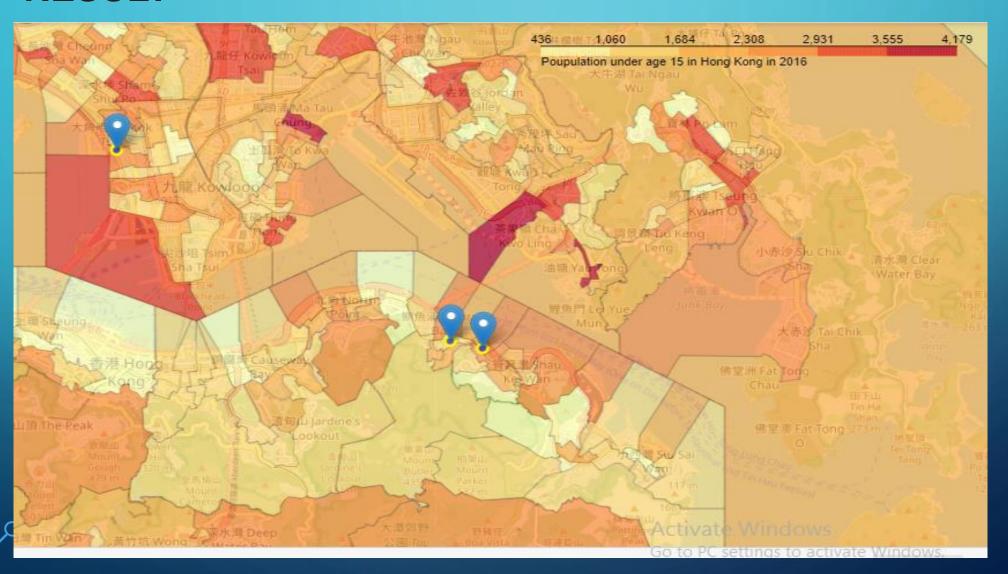
METHODOLOGY

	Code	Nursery_School_Count
22	BE23	7
17	BE18	6
0	BE1	5
7	BE8	5
3	BE4	4
21	BE22	4
1	BE2	4
11	BE12	3
16	BE17	3
15	BE16	3
13	BE14	3
10	BE11	3
6	BE7	3

5	BE6	3
26	BE27	3
14	BE15	2
8	BE9	2
23	BE24	2
25	BE26	2
12	BE13	1
18	BE19	1
4	BE5	1
2	BE3	1
24	BE25	1
9	BE10	0
19	BE20	0
20	BE21	0

Result

	Code	Nursery_School_Count
22	BE23	7
17	BE18	6
7	BE8	5

RESULT

Poupulation under age 15 in Hong Kong in 2016

436   1,060   1,684   2,308   2,931   3,555   4,179

DISCUSSION

- Based on our analysis, we recommend that among the 27 locations,

- The top three location is BE23, BE18, and BE8.

- We suggest Babington Education should choose BE23 as their next English center location since it has the greatest number of nursery school around 500 meters of the location.

CONCLUSION

- Based on the existing criteria from Babington Education, we suggest that BE23 should be chosen for next English Center location.

- However, we suggest including some criteria such as the number of coffee shops, or the number of shopping center around the specific area.

- Because it could be great for the parents to have a coffee shop around while waiting for the kids to finish their classes.

- We would suggest to do the survey to collect more data to include more criteria into this analysis.