Giving Scenario Ahead





Inspiration/ Small experiment

Getting the inspiration from my Stats 330 experience, we received the scenario that the questions were based on before the exam. Received feedback from my friends who have English as their second language, they felt more confident in the exam and received better marks.

Student A Background

- Came from China and studied in New Zealand for 4 years (1 year in language school + 3 years in UOA)
- Not reading or speaking English fluently
- Have a completed statistics degree

Experiment

- Two text-intensive, scenario-based questions were selected from different semesters of Stats 101. Although the contexts of the questions are different, they test the same conceptual knowledge
- Student A was asked to complete one question without being given the scenario in advance, and another question with the scenario provided beforehand (i.e. allowing the student to translate and do some research about the scenario)

Result

Question without the given scenario

- Took 1 minute 59 seconds
- Only able to give a brief conclusion about the scenario, without details

Question with the given scenario

- Took 37 seconds
- A much more detailed explanation of the scenario



Discussion

- One thing that I realised through this experiment is that the student does not have many unfamiliar words through reading the scenario, but the student just could not pick up the sentence's meaning. According to Zhou (2018), Chinese sentence structures are quite different compared to English sentence structures. Therefore, it makes sense why the student was struggling to pick up the meaning of each sentence in the scenario. Hence, it is important to give students the scenario ahead to help them understand the background and have more confidence in the test or exam.
- According to Brown (2008), foreign students will not feel settled until they reach some linguistic achievement, which can be reflected in some academic achievements. Giving the scenario before exams may help students to reach a higher level of confidence and may help them achieve a better score eventually. By doing this, we are not only helping the students to engage with the statistics course better, but we are also helping our foreign students to find a sense of belonging.
- Frankenstein (2009) points out that the mathematics questions in our curriculum do not reflect the real-world concepts, which may lead students to feel less connected with mathematics and may have a sense that mathematics is useless in the real world. A similar situation happened in my small experience. Student A mentioned that she was not using or connecting the scenario with the questions. She was just using her knowledge to answer questions. This is not what we want for students' statistics learning experience. We want them to reflect on what they know to solve real problems in the real world. By giving the scenario ahead, we can really achieve this goal of helping students to make real-world connections because we can hand out relatively more complicated cases for them to solve.

Reference

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