

Application of the Flipped Classroom and Case-based Learning in a Pre-clinical Speech, Language, and Hearing Sciences Course

Iris H.-Y. Ng, Michael C.F. Tong, Kathy Y.S. Lee
Department of Otorhinolaryngology, Head & Neck Surgery
The Institute of Human Communicative Research

Background:

- Professional Diploma in Communication Disorders and Sciences is first offered in 2019
- Pre-clinical foundational programme for the MSc SLP programme
- Provide students with the opportunity to apply and integrate theory into practice through the observation of real clinical contexts

Project Aim:

Outcome assessment for flipped classroom and case-based learning

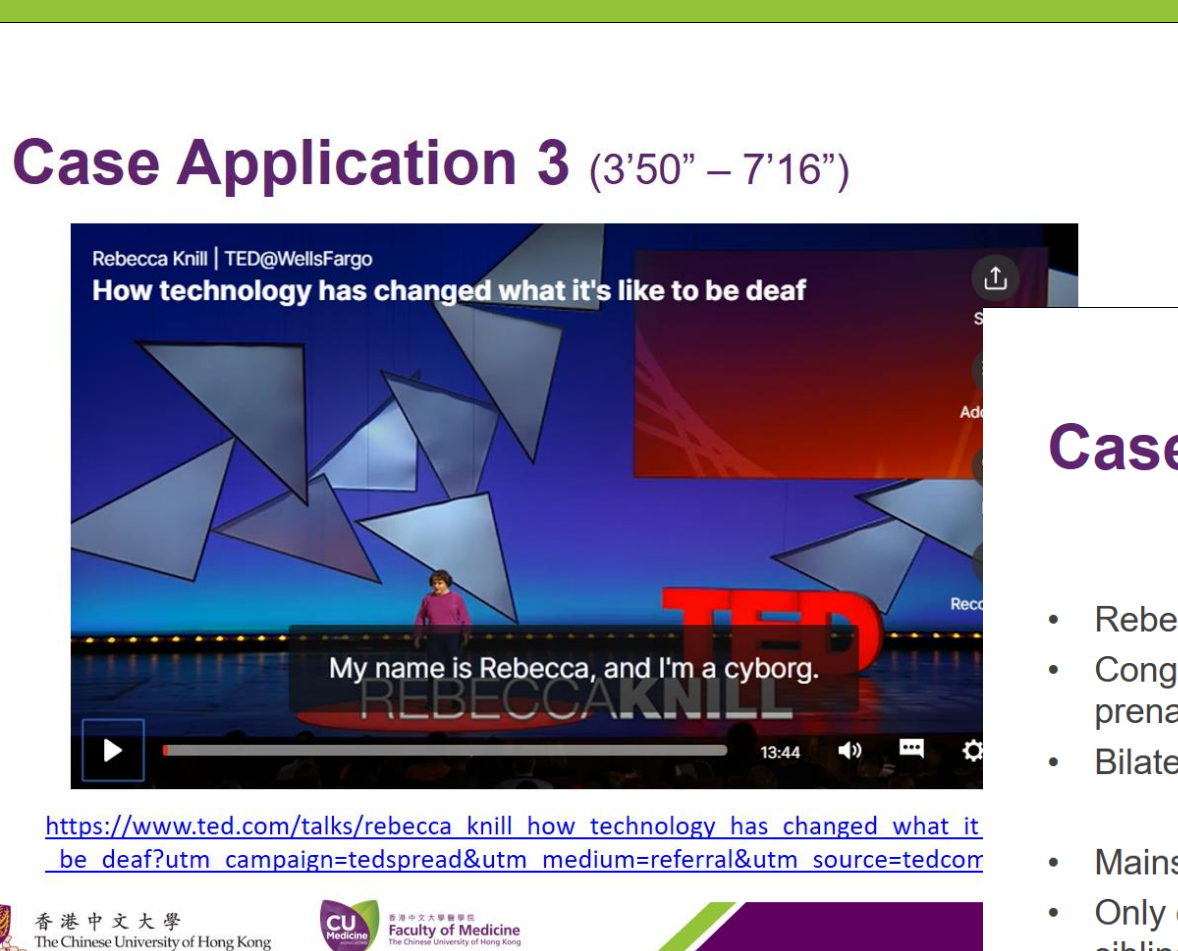
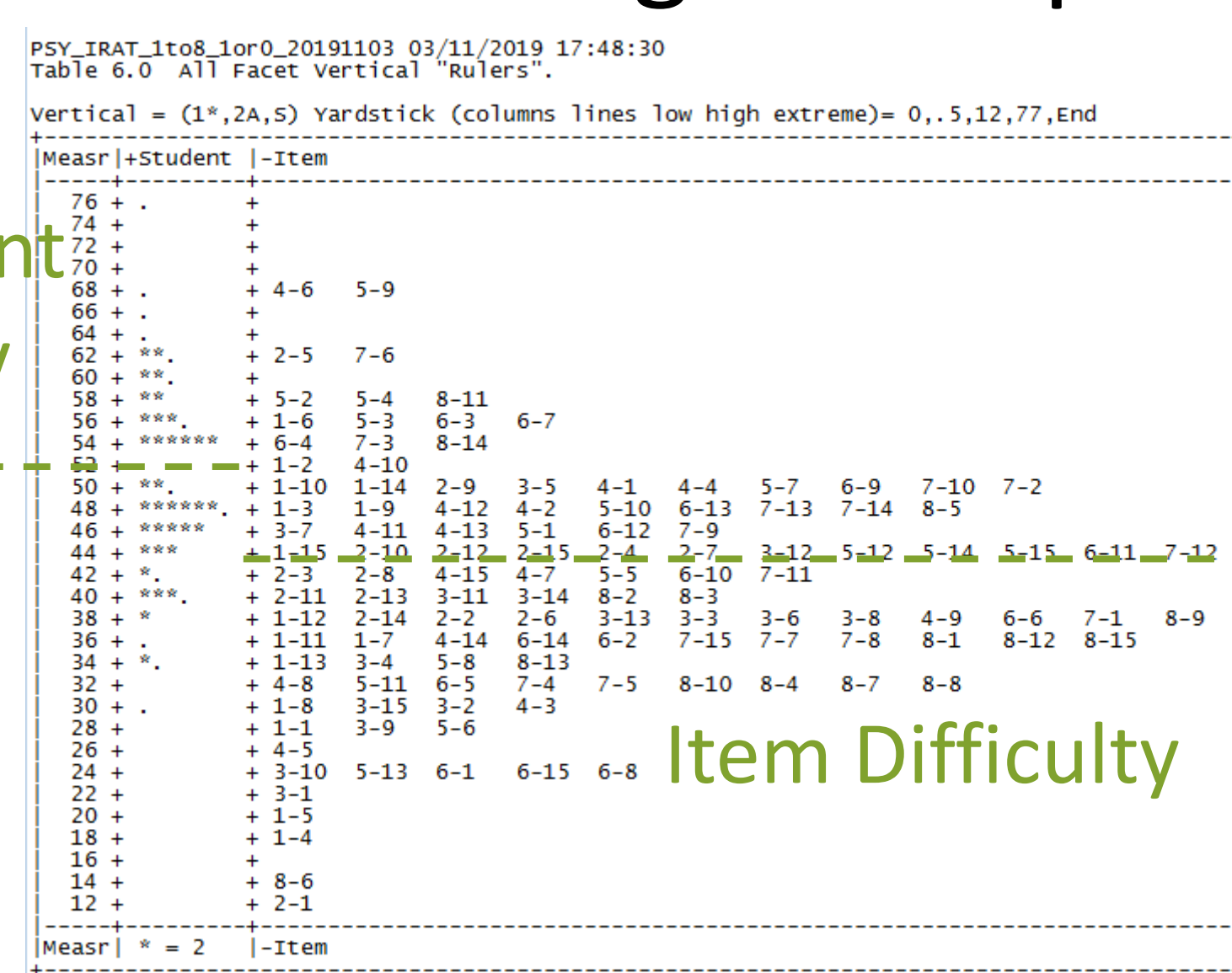
Implementation:

- Pre-class online video for basic theories
- Individual Readiness Assurance Test (iRAT) at the beginning of classes through online learning platform
- In-class group discussion for case-based learning, either face-to-face or through online learning platform
- Outcome assessment through online learning platform

Results:

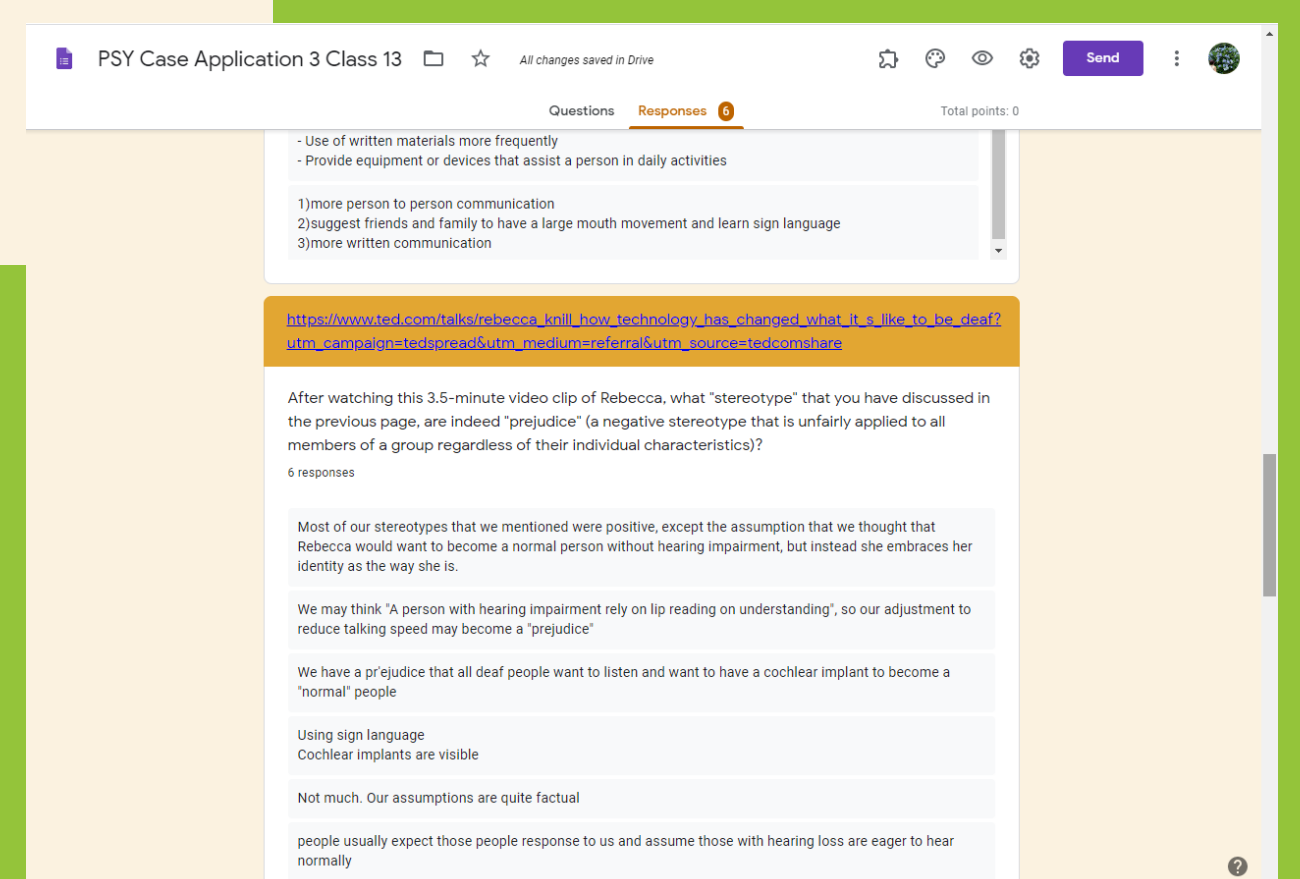
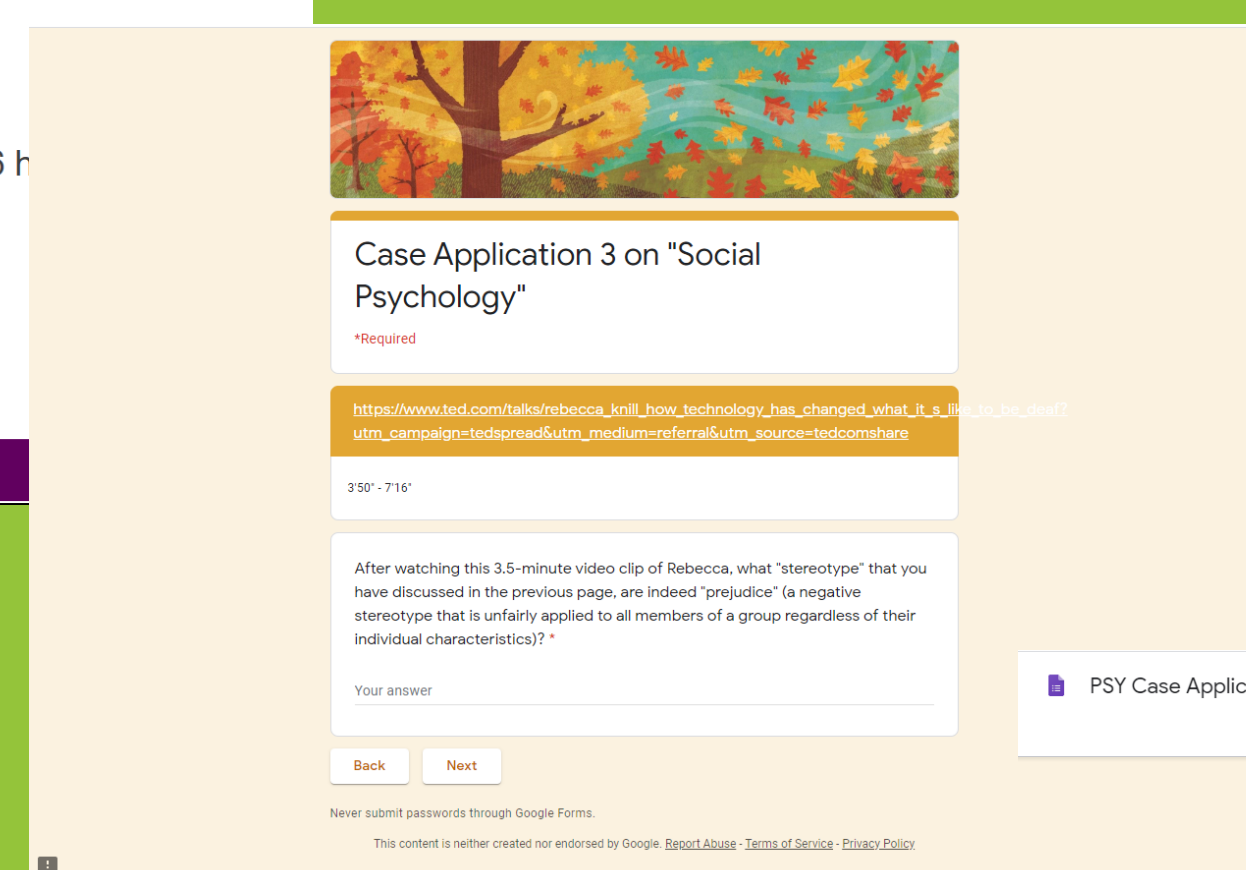
- Formative assessment – Individual readiness assurance test, distribution of students' ability roughly matches that of item difficulty, implying that students gained knowledge from pre-class work as expected

Student Ability



Case Application 3

- Rebecca (F/Adult)
- Congenital bilateral progressive hearing impairment because of prenatal infection (German measles)
- Bilateral profound hearing loss since (early) childhood
- Mainstream schooling
- Only child with hearing impairment in the family, with 6 H siblings
- Bilateral hearing aids
- Lip-reading (speech reading)
- Bilateral cochlear implant at her early adulthood

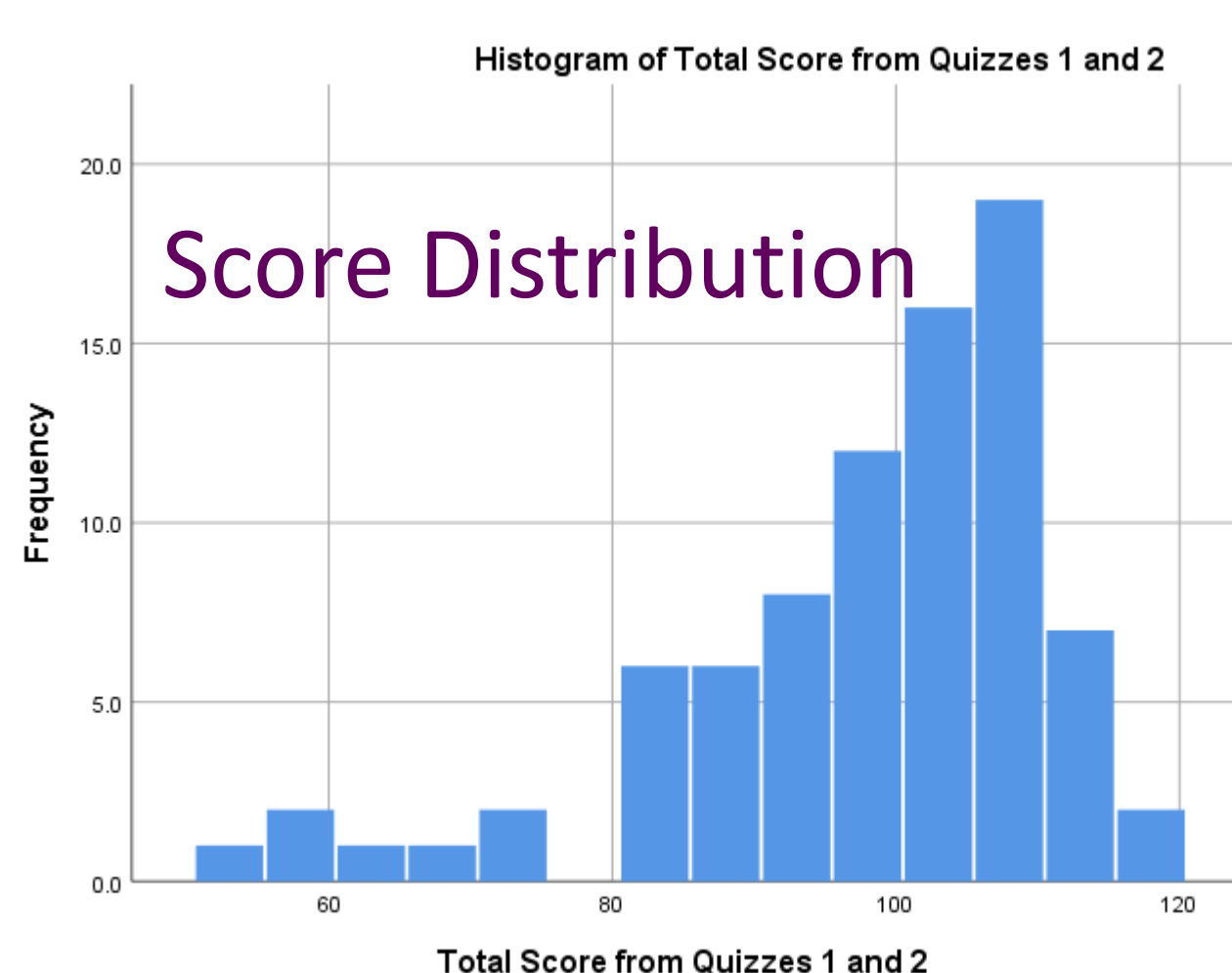


Implications:

Flipped classroom approach and case-based learning did serve the purposes of pre-clinical foundational learning, to apply theory into practice through the observation of clinical contexts

Outcomes have not been jeopardized by the mixed-mode / online teaching and learning

- Summative assessment – from the 2 quizzes, 1 administered online and 1 face-to-face, distribution of students' ability is higher than that of item difficulty, implying that students' learning through both pre-class work and in-class case-based learning exceeded our expectation



Student Ability

