

Challenges in digital literacy in English curriculum

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Background

English / humanities students

- A blend of diverse goals, methods and learning outcomes within the discipline

Hong Kong-based

- Advanced L2 learners of English
- Native speakers of Cantonese (plus other languages)

Traditional design of the curriculum

- Lack of integration across the two disciplines and between different modules

Support to DH

- A bottom-up effort at the module level
- Lack of a pedagogical coordination at the disciplinary level

Goals:

- 'English language studies'
= Literature + Linguistics (+ Pedagogy)
- Blending digital skills into English language curriculum
- Broader context: Transferable skills in humanities

Challenge 1: Insufficient IT skills

- Self-fulfilling prophecy: 'I'm an English student, I don't know about computer!'
- Inexperienced in reading and learning from error messages, software documentations or forum discussions.

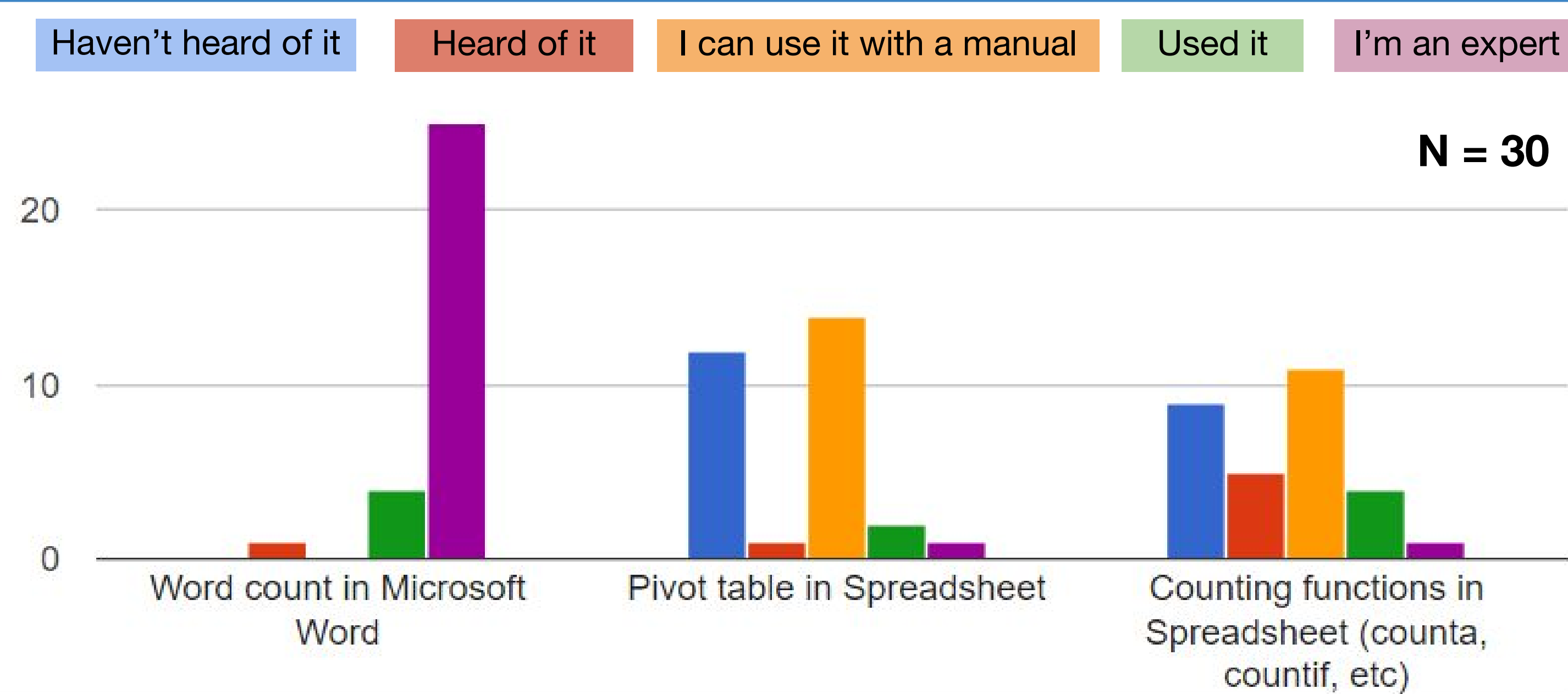


Fig. 1: Sample of questions on confidence in IT skills

Implementation 1: Tailor-made version of corpus linguistics / NLP

Softwares with GUI (graphical user interface)

→ to avoid the fear of 'coding' and command prompt

- Spreadsheet
- AntConc

Non-English elements:

→ bridging linguistics to applications language technologies

- Chinese / Cantonese corpora
- Geo-chart of speakers & dialects

Challenge 2: Inadequate foundation of formal systems in humanities

- Lack of awareness of generalisation observations
 - e.g. Teaching e.e.cummings's 'anyone lived in a pretty how town' in the poetry class
 - e.g. Finding morphemes in foreign languages
- Applying old model to new dataset can be challenging
- Stronger in concepts, weaker in turning complex concepts into smaller steps (Cf. 'Modeling' (McCarty, 2004), 'Operationalizing' (Moretti 2013) & 'Computational thinking' (Wing 2006))

Implementation 2:

Reverse engineering from research question

Start with the research question, not the technology!

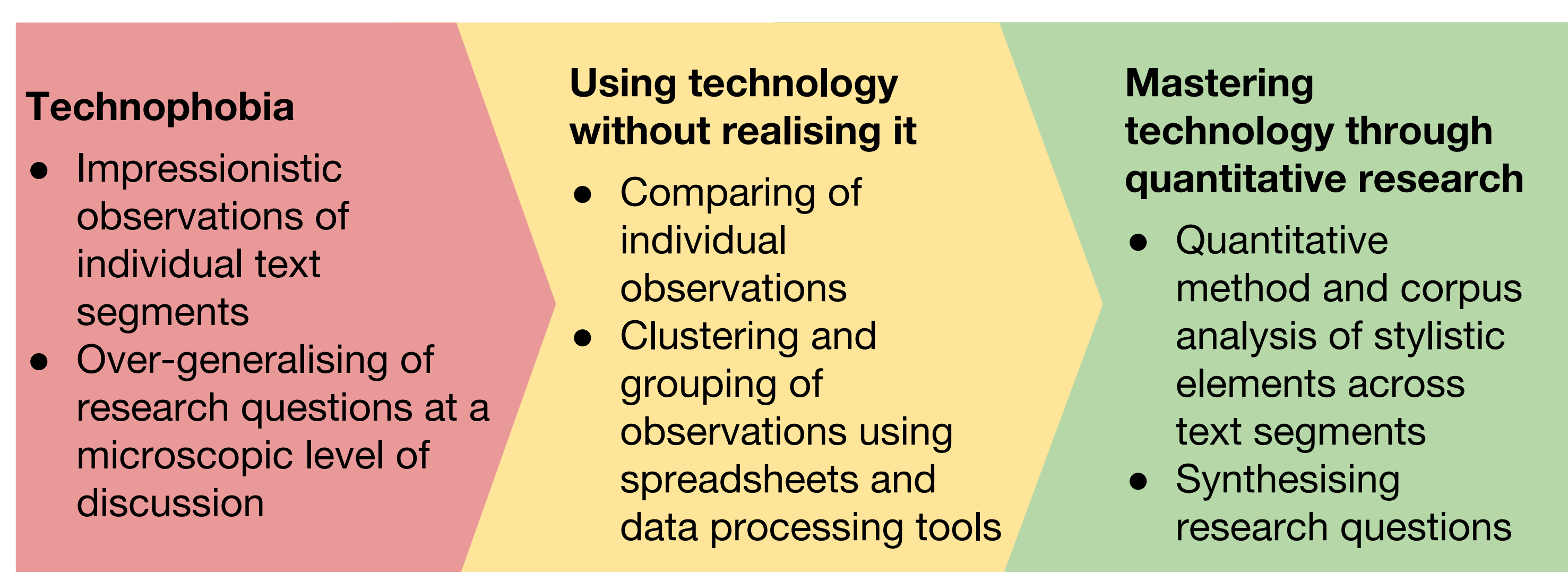


Fig. 2 Process of introducing technology in literature research projects

Outcomes

1. Quantifying stylistic observations
 - Evidence-based observations
 - Macroscopic-level of genre studies and larger datasets
2. Term projects showing pattern recognition in texts
 - 'Change and use of "-phobia" in COCA'
 - 'Semantic change in "get" and "like" in English'
 - 'Acceptance of English-Cantonese code-mixing among Hong Kong Cantonese speakers'

Conclusions

- Call for level-appropriate version(s) to prepare humanities students for more challenges
- Adjusting DH - models for other humanities disciplines (e.g. more than one tech-focused course before actual NLP?)

References

- Anthony, L. (2014). *AntConc (Version 3.4.3)* [Computer Software]. Tokyo, Japan: Waseda University. Available from <http://www.laurenceanthony.net/>
- Davies, M. (2008-). *The Corpus of Contemporary American English (COCA): 520 million words, 1990-present*. Available online at <http://corpus.byu.edu/coca/>.
- McCarty, W. (2004). Modeling: a study in words and meanings. *A companion to digital humanities*, 42, 254. <http://www.digitalhumanities.org/companion/>
- Moretti, F. (2013). 'Operationalizing': or, the Function of Measurement in Modern Literary Theory. *Literary Lab Pamphlet*, 6.
- Poe, E. A. (1903). *The Works of Edgar Allan Poe, The Raven Edition, vol 2*. New York: P. F. Collier and Son.
- Wing, J. M. (2006). Computational thinking. *Communications of the ACM*, 49(3), 33-35.