

Statistics simplified

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Abstract

This poster presentation aims to develop statistical literacy by debunking common misunderstandings, disambiguating key terminology and conveying complex concepts in an easy-to-understand manner. Linguists and language teachers initially relied on introspective reflection to analyze language, but the recent trend in many linguistic domains is to use corpora. Corpus linguistics is primarily a quantitative study of a sample of texts and necessitates the use of statistical formulae to generalize to the population of texts. Failure to understand the meaning of statistical evidence can lead teachers to ill-informed decision-making, which could waste not only the teachers' time, but the time of all future cohorts of their students. Language teachers and applied linguists tend to lack confidence in their statistical literacy (Loewen, 2014). This poster presentation is pitched at those who want to understand statistics without getting to grips with the underpinning mathematics. Commonly-misunderstood terminology is explained, and extracts are used to facilitate discussions on the evaluation of the research. These extracts enable statistics to be explained in context, and act as a springboard for discussions. Those with little experience of statistics can focus on the measures of central tendency, position and dispersion, while those higher up the learning curve can focus on measures of association, namely covariance and regression. Through collaborative dialogues and open-minded discussions both the presenter and participants can share and expand their knowledge of statistics in relation to language teaching.

Loewen, S. et al. (2014). Statistical literacy among applied linguists and second language acquisition researchers. *TESOL Quarterly*, 48 (2). 360-388.

Biodata

John Blake is a research lecturer at the Japan Advanced Institute of Science and Technology. He has taught English at universities and schools for over 20 years in Japan, Thailand, Hong Kong and the UK. He currently teaches critical literacy and statistical literacy to postgraduates.