Dr Emma Marsden - emma.marsden@york.ac.uk

Prediction in language learning: Can we teach it and what sort of knowledge is generated?
PhD in Applied Linguistics

A) RATIONALE FOR THE PROJECT
When we hear or read language in real time, we constantly, and extremely rapidly, anticipate which sounds, words and grammar might come up next. It is not clear whether this phenomenon is the result of having already learnt language - that is, after multiple experiences we become adept at predicting what will come next - or whether, in fact, “prediction” is a key mechanism by which we actually learn language- that is: if our predictions are met by what we subsequently hear, this establishes and/or consolidates knowledge of the language; if our predictions are not met, we learn from our error and tally the likelihood of particular combinations in language (not) occurring. To date, there is strong evidence of prediction in native speakers, but evidence is much less clear in second language (L2) learners. Also, L2 research to date has (a) focused on a narrow domain of grammar in the noun phrase (gender, animacy, case) and (b) not yet investigated whether explicitly teaching and practising prediction can help learning. This research project would make a cutting-edge contribution to both learning theory and teaching practice by investigating these issues in a classroom experiment, focusing on hitherto neglected syntax.

B) REFERENCES THAT SHOULD BE READ (if you do not have access to these, please email me)
DOI: 10.1017/S027226311600022X Here

C) RESEARCH AIMS / QUESTIONS
Focusing on one syntactic phenomenon in one language (such as one type of relative clause, the passive voice, one type of interrogative), this project would investigate
1) the extent to which L2 learners and native speakers generate syntactic predictions
2) the extent to which prediction can be taught, as measured on a battery of outcome tests.

D) METHODS
The study would probably use two groups of learners: highly advanced and intermediate, with approx. 30 in each group, and a native control (n=20).
Experiment 1 will develop and administer a battery of tests to determine whether anticipation is observable online (via eye-tracking and/or self-paced reading) and to measure oral production and explicit acceptability judgments. Experiment 2, adopting an experimental pre, post, delayed post-test design, will randomly assign learners to one of (1) explicit information plus prediction

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practice’, (2) explicit information plus exposure’, or (3) a test-only group. The type of knowledge would be measured via the same test battery, immediately and 10 weeks after the intervention.

E) SKILLS AND OPPORTUNITIES YOU COULD GAIN
You would work with various experimental environments such as PsychoPy or EPrime, statistical analysis packages (SPSS, R) and experience pre-registering your studies via the OSF in line with cutting edge open science practices. Research assistant opportunities could also be available on the IRIS project.