



Eyetracking for language teacher development

**Faculty of Wellbeing Education
and Language Studies (WELS)**

Call for PhD projects starting in October 2024

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Project description

School

Languages and Applied Linguistics

Members

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Aim

To use eyetracking data to help language teachers in developing their skills in online language teaching.

Methodology

Mixed methods:

- eyetracking used as data collection tool for the first step of the project.
- reflective action research for the second step of the project.

Contribution

Online language teaching is a highly skilled and specialised profession. Even very experienced language teachers are not automatically able to direct students' attention in an online environment (Shi, Stickler & Lloyd, 2017); often leading to confusion on the students' part and frustration or insecurity on the teachers' side. Creating joint attention is a relevant basis for online teaching (O'Rourke & Stickler, 2017) and can support collaborative meaning making online (Satar, 2016).

The School of Languages and Applied Linguistics is a place of expertise in training teachers for online language teaching. However, with increasing demand in online teaching in line with digital developments (Stickler & Emke, 2023) elsewhere, initial online teacher training and continuing up-skilling and professional development for language teachers need to become more streamlined and available anytime, anywhere.

Through investigating the potential of eyetracking data for remote and asynchronous professional development, the Open University can further contribute to cutting-edge online language teaching, adding to the pool of knowledge already recognised as world-leading in our area.

PhD project

The doctoral researcher should be interested in quantitative methods and/or Action Research.

Eyetracking:

For the quantitative work, the doctoral researcher will be trained in using and analysing eyetracking. Eyetracking has been used as a method in applied linguistics for over a century (Jacob & Karn, 2003), from initially researching reading of printed texts (Just & Carpenter, 1976; 1980; Rayner, 1978; 1998) to investigating digital screen or Human-Computer-Interaction (Duchowski, 2003; Poole & Ball, 2006). The questions asked have remained similar: where is the user's (reader's) attention focused while engaging with a screen (text)? The underlying hypothesis (Eye-Mind-Hypothesis) – widely but not unanimously accepted – claims that gaze focus can indicate cognitive focus, i.e. where the gaze is focused, there is the main focus of attention (Anderson, Bothell & Douglass, 2004; Underwood & Everatt, 1992). In Applied Linguistics, eyetracking has recently gained momentum (Abdel Latif, 2019; Roberts & Siyanova-Chanturia, 2013), yet few researchers have used eyetracking in synchronous online foreign language learning (Cappellini, 2019; Cappellini & Hsu, 2022; Michel & Cappellini, 2017; Michel & Smith, 2019; O'Rourke, 2008; Smith, 2010; 2012). Studies with OU students and ALs, conducted by the PI and Co-PI of this project (Shi & Stickler, 2021; Shi, Stickler & Lloyd, 2017; Stickler & Shi, 2015; 2017), led to the development of a novel, sociocultural model of eyetracking (O'Rourke et al., 2015; Stickler & Shi, forthcoming 2024).

Data collection will take place at the Jenny Lee Labs at the Open University, where experienced and less experienced online language teachers will be observed and their eye movements tracked while they are engaged in online tuition.

Action research:

The action research element of the project - to be done by the same or a different doctoral researcher - will entail setting up online teaching tasks, learning tasks with automatic feedback, observation, and interviews. The researcher will need to evaluate engagement of the teachers with online materials, analyse interview responses, and based on this data, build a follow-up cycle of training and observation.

