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Title of Project
Automatic Assessment of Stance-Taking in English
Academic Writing: A Systemic Functional Perspective

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TIRF Research Topics Investigated
(1) Language Assessment
(2) English as a Medium of Instruction
(3) Content-Based Instruction

Project Summary

Increasing attention to performance assessment in standardized and classroom-based assessments encouraged researchers to develop Automated Writing Evaluation (AWE) systems (Shermis & Burstein, 2013). While commonly used AWE systems, such as e-rater®, undergo rigorous validation procedures, researchers are aware that they are limited in assessing functional dimensions of language use (i.e., the degree to which features of language use are effective in relation to the communicative goals of the writing; see Lu, 2021). This lack potentially undermines the construct validity of AWE systems because performance assessments are often used to assess test-takers' functional writing proficiency. To address this issue, this study aims to develop an automated linguistic analysis tool that utilizes state-of-theart Natural Language Processing (NLP) pipelines to identify functional categories of stancetaking in writing samples.

Study 1 describes the architecture of the automated tool and empirically evaluates it against a human-annotated corpus of academic written English developed for this project. Using the developed tool, Study 2 highlights the variety of stance-taking strategies used in university written assignments across genres, course levels, and disciplines. Finally, Study 3 investigates the relationship between stance-taking strategies and writing quality scores in the context of a standardized English proficiency assessment. Studies 2 and 3 together inform researchers and practitioners about the patterns of interpersonal language use in university writing (Study 2) and standardized English proficiency assessment often used for university admission purposes (Study 3). The annotated corpus and the automatic analysis tool will be freely available for research and educational purposes.