Digital vs Active Learning: Academic English in a Multicultural Society
(Poster)

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Abstract

English is a lingua franca in global communication, career opportunities, and higher education – specifically in Science, Technology, Engineering, and Math (STEM) (1). As such, academic writing in English is emphasized worldwide and, consequently, in Israeli academia (2). Despite the necessity for academic writing in English, many constraints in teaching and learning academic writing are still present across Israeli universities. Israel's multicultural society struggles with this challenge since one common topic must be distributed across a large and diverse public (3). In addition, cognitive abilities, the cornerstone of language acquisition, must be considered since cognitive diversity among students may add to the difficulties of English academic writing study (4). Therefore, pedagogy requires contemporary, applicable, and effective interventions, while considering the cultural and cognitive variety Israeli students bring to class. Two widely adopted methods to enhance academic writing, both easily added to English curricula and acknowledge students' diversity, are digital and Active Learning (AL). AL is based on peer and teacher collaboration, and digital learning is AI-based, enabling independent interactive learning. Both methods were found to facilitate students' efforts in English academic writing (5,6). While AL may enhance cognitive skills, digital learning addresses issues of a multicultural academic audience. However, these interventions have not been thoroughly tested among Israeli academics.

To this end, the current study aims to develop and research up-to-date AL and digital interventions for academic English writing pedagogies. Specifically, we aim to investigate STEM students' English academic writing outcomes during academic English courses in two main focal points, persuasive writing and vocabulary. Participants are Technion students taking part in academic English courses. Lessons on academic writing in English will be divided into four study methods: 1) an active learning lesson based on group discussions with a writing task, 2) an AI-based online interactive learning task, (3) a lesson incorporating both an AL lesson and an AI-based task; and (4) a standard class (control) task in which students will be asked to complete a writing task and that was written in class or at home.

Both AL and digital interventions have unique strengths and weaknesses in teaching writing. The choice between them, or the decision to integrate both, should be made considering specific goals, context, and populations involved. This poster is in the early stages of a Ph.D. project and will present the intervention and its potential benefits to improve writing in a diverse society.

Keywords: Academic English, Active Learning, AI, Multiculturalism, Cognition.

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