


Whether English Proficiency and English Self-Efficacy Influence the Credibility of ChatGPT-Generated English Content of EMI Students

Duong Thi Thuy Mai
Hanoi University of Science and Technology, Vietnam

Nguyen Van Hanh
 <https://orcid.org/0000-0001-9987-4151>
Hanoi University of Science and Technology, Vietnam

ABSTRACT

This study investigated whether English proficiency (EP) and English self-efficacy (ESE) influence the credibility of ChatGPT-generated English content (CCGEC) of college students in the English-medium instruction (EMI) courses. We observed a college-level EMI course called “Technical Writing and Presentation”, where instructors encouraged their students of non-English majors to use ChatGPT for discovery learning in their EMI learning tasks. A survey of 800 students showed that ChatGPT was primarily used for providing explanations, suggesting ideas and structures, and preparing presentations. Analyzing the survey data with the MANCOVA procedure revealed that students' EP levels did not influence their CCGEC, and ESE did not moderate the relationship between EP and CCGEC in the EMI course context. These findings suggest that ChatGPT can be a valuable tool for EMI students regardless of their EP or ESE.

KEYWORDS

English Proficiency, English Self-Efficacy, Credibility, ChatGPT-Generated English Content, English-Medium Instruction

INTRODUCTION

Globalization is considered to be one of the most influential factors in higher education, causing English to be used as a medium of instruction in more and more courses in non-English speaking countries (Thompson et al., 2022). It is believed that applying English-medium instruction (EMI) in specialized courses is better for non-English majors if the students do not have difficulty understanding the lectures (Kim & Chang, 2013). Active exposure to and use of English can improve English self-efficacy (ESE) and English proficiency (EP) in communication as well as encourage students to acquire knowledge of specialized courses in English (Muslim et al., 2022). However, low levels of EP among students are considered a serious problem that affects the effectiveness of EMI courses, even when instructors are qualified to teach these courses (Muslim et al., 2022). Additionally, differences in EP among students may cause EMI courses to benefit only a certain proportion of students with higher levels of EP (Chou, 2017).

DOI: 10.4018/IJCALLT.349972

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

A study revealed that by leveraging the capabilities of advanced chatbot tools, instructors can address language issues related to low ESE and EP among students in EMI courses (Hong, 2022). Chatbot tools such as ChatGPT can serve as an effective technology-enhanced learning support tool for students in learning grammar and vocabulary, checking translations, and getting inspiration for composition tasks (Mai et al., 2024; Ross, 2023), developing reading and writing skills (Bin-Hady et al., 2023), improving ESE and EP (Kostka & Toncelli, 2023), and enhancing students' motivation and engagement in the English-learning process (Muñoz et al., 2023). Integrating chatbots such as ChatGPT has significantly improved speaking EP and students' willingness to communicate (Yuan, 2023). ChatGPT serves as a valuable tool in learning new vocabulary in its ability to define words, create conversations tailored to different EP levels, or explain vocabulary in students' first language (Kostka & Toncelli, 2023). Students exhibit a positive reception toward ChatGPT-generated content and demonstrate a lack of interest in utilizing this technology for academic dishonesty in their English-language coursework (Kostka & Toncelli, 2023).

However, varying perceptions of ChatGPT-generated English content among students raise important considerations regarding its credibility (Mai et al., 2024). More specifically, some students express high credibility of ChatGPT-generated English content (CCGEC) in many aspects, such as sufficiently insightful content, reasonableness of suggestions and explanations (Kostka & Toncelli, 2023), and good language translation (Jiao et al., 2023). Meanwhile, some other students expressed distrust of ChatGPT-generated English content because of errors and biases in the output (Kostka & Toncelli, 2023) and syntax and grammatical errors (Urchs et al., 2023). Students with low CCGEC expressed the opinion that it takes time for their group to verify ChatGPT-generated content (Kostka & Toncelli, 2023). Students believe that it is more useful and feasible to collect information themselves without using ChatGPT (Kostka & Toncelli, 2023). The varying perceptions of the CCGEC among students led us to question whether EP and ESE influence the CCGEC of students in EMI courses. Hence, the objective of this study was to investigate whether EP and ESE influence the CCGEC of college students enrolled in the EMI course.

In order to achieve this intended objective, instructors in a college-level EMI course titled "Technical Writing and Presentation" (TWP) advised their students to utilize ChatGPT for discovery learning in their assigned work. The culmination of classroom activities involves the composition and delivery of a comprehensive technical or scientific report in the English language. During the last session of the TWP course, we administered an internet-based questionnaire to gather data on the students' EP, ESE, and CCGEC. Subsequently, a MANCOVA (multivariate analysis of covariance) approach was employed to investigate the influence of students' EP and ESE on their CCGEC.

LITERATURE REVIEW

Concepts of English Proficiency and English Self-Efficacy

English is one of the most widely used languages globally, so learning this language is becoming increasingly necessary for non-English-speaking students. EP refers to the ability of students to use the English language for a variety of communication purposes (Renandya, 2018). A student with high English proficiency is said to be able to understand the language without difficulty, express ideas clearly in speech and writing, and communicate with native speakers comfortably (Renandya, 2018). An individual's EP is often measured by common language-proficiency tests such as IELTS (International English Language Testing System), TOEFL (Test of English as a Foreign Language), TOEIC (Test of English for International Communication), CEFR (Common European Framework of Reference for Languages), and the Cambridge Assessment. Among them, the CEFR is one of the most prominent and standardized EP reference documents for language exams (Harsch, 2017). CEFR is accepted and used in many countries to evaluate an individual's EP level, as well as refer to equivalent scores of other EP exams. The CEFR framework describes six levels of proficiency and arranges them into three main groups: basic user, independent user, and proficient user (Harsch,

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/whether-english-proficiency-and-english-self-efficacy-influence-the-credibility-of-chatgpt-generated-english-content-of-emi-students/349972

Related Content

Learner Engagement in Computer-Mediated Chinese Learning

Zhiyan Guo and Zhizhuo Guo (2013). *Computer-Assisted Foreign Language Teaching and Learning: Technological Advances* (pp. 104-117).

www.irma-international.org/chapter/learner-engagement-computer-mediated-chinese/73261

Mobile Phones' Video Recording Tool: A Solution to Freshmen's English-Speaking Anxiety

Van Huynh Ha Le and Huy Ngoc Nguyen (2021). *International Journal of Computer-Assisted Language Learning and Teaching* (pp. 16-32).

www.irma-international.org/article/mobile-phones-video-recording-tool/273720

Design of the While Listening Activities in Interactive Multimedia Listening Software

Vehbi Tureland Atif Waraich (2015). *Intelligent Design of Interactive Multimedia Listening Software* (pp. 103-141).

www.irma-international.org/chapter/design-of-the-while-listening-activities-in-interactive-multimedia-listening-software/135614

Teaching English for Academic Purposes through the Use of Digital Tools

Tal Levy and Leslie J. Cohen (2017). *Flipped Instruction Methods and Digital Technologies in the Language Learning Classroom* (pp. 21-63).

www.irma-international.org/chapter/teaching-english-for-academic-purposes-through-the-use-of-digital-tools/164801

Navigating the Digital World: Teaching Contemporary Chinese Culture via a Third Space With a Multimodal Approach

Amily Guenier and Ge Min (2022). *International Journal of Computer-Assisted Language Learning and Teaching* (pp. 1-12).

www.irma-international.org/article/navigating-the-digital-world/313441