

AI-Assisted Content and Language Integrated Learning (CLIL): Enhancing English Language Proficiency among Tamil-Medium Social Sciences Undergraduates

Luxika Raguram¹, Sharmi Shanmuganathan²

<https://icode.bit.uom.lk/proceedings>

Abstract:

Content and Language Integrated Learning (CLIL) is recognised as an effective pedagogy for integrating disciplinary content with L2 development. With increasing AI integration in higher education, AI-assisted CLIL offers new possibilities. This study investigated the effectiveness of AI-assisted CLIL in improving the L2 proficiency of second-year Tamil-medium Social Sciences undergraduates at the University of Jaffna, Sri Lanka. A one-group quasi-experimental mixed-methods design was employed with 34 participants over one semester. Data were collected from a pretest and posttest measuring reading and writing skills, and semi-structured interviews exploring learners' perceptions and experiences of the intervention. Throughout the study, participants engaged with subject-related English texts and tasks while using AI tools, like ChatGPT and Gemini to support content development, and text comprehension, along with weekly presentations. Quantitative analysis revealed significant improvement in students' performance. Qualitative findings indicated that participants perceived AI-assisted CLIL as conducive to independent learning. Participants reported increased confidence, improved ability to access and understand materials in English, and greater reliance on AI tools for learning. Thus, the findings suggest that AI-assisted CLIL is an effective pedagogical approach for promoting English language development while supporting disciplinary knowledge and learner autonomy provided that students receive Critical AI Literacy training.

Keywords: AI-assisted CLIL (AICLIL), AI in Education, Critical AI Literacy, Self-directed Learning, Tertiary Level