RUN LEARNING AND TEACHING AWARDS 2025

Name: Job Fransen

Institution: Charles Sturt University

Title: Artificial intelligence as an adversarial collaborator to engage students in critical reflection

Abstract: I used AI to promote adaptive thinking in a second-year Bachelor of Sport and Exercise Science subject. In an era of rapid societal change driven by generative AI, equipping students with these skills is crucial.

For their assessment, students were tasked with using an AI agent to challenge their own arguments. First, they developed arguments favouring interventions to overcome maturity bias in sport, where biologically more mature athletes may have an unfair advantage. Then, they prompted their AI adversary to provide counterarguments. Students then had to recommend a practical intervention, integrating both their original arguments and the AI's counterarguments.

This process of adversarial collaboration is rooted in the scientific process, where it is common for arguments to be rigorously tested. By defending their reasoning against the AI's critiques, students were encouraged to refine their understanding. In a seven-minute video submission, they reflected on how this collaboration aided or hindered their critical reflection. Students largely reported that the AI adversary helped them "think more deeply" and "expose logical fallacies," encouraging them to identify biases in their own reasoning.

This shift from passive information consumption to a proactive learning stance prepares students to navigate a rapidly evolving professional landscape.