



Using Artificial Intelligence Agents for Professional Skills Development in Sport and Exercise Science Students

Mohsen Shafizadeh and Andrew Barnes

Sheffield Hallam University

Abstract

Artificial intelligence (AI) agents can enhance education in multiple ways, including assessment support, increasing peer dialogue and providing role-play opportunities. Their pedagogical applications are broad, and there is a growing need to explore how they can support reflective practice. The aim of this project was to investigate how AI agents can be used within sport and exercise science courses, focusing on students' perspectives of their value for professional skills development. We recruited four MSc students enrolled in the Applied Sport and Exercise Science programme during the 2025–26 academic year. The participants came from varied professional backgrounds, including physiotherapy and sport and exercise science, and were familiar with work-based learning through their previous studies. Data collection followed a co-development model in which students engaged in activities exploring different areas through a semi-structured interview and the active design of a roadmap for an AI agent. The session was voice-recorded and transcribed for thematic analysis. The analysis generated three overarching themes describing the main applications of AI agents in this subject area: AI for course learning, AI for personal and professional development, and AI for work-based learning. In conclusion, this mini-project demonstrates that students perceive the value of AI agents as extending beyond assessment preparation. They identified several additional ways in which AI can support their learning and development throughout the course. It is suggested that the applications of AI within the course regulations be expanded and that more formal learning sessions involving AI be incorporated into the course structure.

Keywords

artificial intelligence, professional skills, sport science course, work-based learning

Citation:

Shafizadeh, M. & Barnes, A. (2026). Using artificial intelligence agents for professional skills development in sport and exercise science students. *Journal of Scholarship of Teaching and Learning Enquiry*, 1(1). <https://doi.org/10.7190/jostle.v1i1.595>