



Designing interdisciplinary sports science curricula to enhance applied learning and integration

Andrew Barnes, Alan Ruddock, Hayley Mills, Emily Newton and Mohsen Shafizadeh
Sheffield Hallam University

Abstract

Designing curricula that reflect the interdisciplinary nature of sport and exercise science remains a persistent challenge within higher education. Traditional programme structures often compartmentalise core disciplines, limiting students' ability to integrate knowledge in applied contexts. This project outlines the development and evaluation of an interdisciplinary curriculum within Sports science and Sport, Exercise and Health courses at Sheffield Hallam University. The curriculum redesign was guided by a practice-based philosophy, aligning disciplinary content around authentic sport performance and health scenarios. Core modules were restructured to foreground real-world problems (e.g., injury risk, performance optimisation, behaviour change), requiring students to synthesise knowledge across domains. Teaching strategies included team-based working, case-based learning, and scaffolded assessments designed to promote integration and application, rather than reproduction of siloed knowledge. Evaluation draws on student attainment and feedback from two course delivery cycles. This work contributes a practical framework for embedding interdisciplinarity within sports science curricula, emphasising alignment between learning outcomes, teaching activities, and assessment. It also highlights the importance of collaborative curriculum design and ongoing evaluation in sustaining innovation. Ultimately, this approach aims to better prepare graduates for the complex, multifactorial demands of contemporary sport and health environments.

Keywords

curriculum design, multidisciplinary, practice-based design, authentic assessment.

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