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**Using sport to engage and motivate students to learn mathematics.**

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Summary: This article describes how technology has been used to motivate the learning of mathematics for students of Sports Technology at Loughborough University. Sports applications are introduced whenever appropriate and Matlab is taught to enable the students to solve realistic problems. The mathematical background of the students is varied and the required prerequisite is a General Certificate of Secondary Education grade A in mathematics. Group projects include modelling the velocity of a downhill skier, the effects of lift and drag on the length of drive of a golf ball and the size of parachute required to ensure a smooth landing. All of these require the use of Matlab. In-class engagement is enhanced by the introduction of electronic voting systems. Questions involving sports applications can be posed in-class and immediate feedback received. The effect of introducing such material, on attendance and progression rates, and student engagement is reported.

*Classification:* D45 C75

*Keywords:* learner engagement; feedback; student motivation; universities; educational technology; student projects; mathematics activities; handheld devices; undergraduate students; attendance; mathematics achievement; college mathematics

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