GAMES FOR PHYSICS

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KEYWORDS: games, physics education, electromagnetism, Lorentz force, game design

ABSTRACT
Games can and have been used to educate and train in many diverse areas. Most educational games are directed at primary and high school students. Yet the average age of a ‘gamer’ is around 30! In this paper we present our case for why games provide another tool in the repertoire for education. We state the WUPI Principle: Teaching, Learning, Assessment and Fun ‘While yoU Play It’.

We describe our process for creating games to educate students at the university level. We develop our process largely independent of any particular subject so as to be of use to a wide variety of educators in many different subjects.

We focus on games for physics students and demonstrate our efforts with a game prototype.

We compare and contrast our prototype with existing educational software.

Finally we discuss our study design to examine the efficacy of using games in first year physics.