

# The application of massively multiplayer online role playing games to collaborative learning and teaching practice in schools

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The authors believe that the overlap between computer supported collaborative learning (CSCL) and games design theories can now be tested and applied to high school teaching practice, due to the large uptake of Internet access in schools. Teachers and students at a High School in Perth, Western Australia, are being used in a pilot study as “proof of concept”. This study will entail the development, testing and investigation of the use of a massively multiplayer online role playing game (MMORPG) to facilitate collaborative learning in the English and Science domains. This paper describes the background, preliminary work and findings involved in the pilot study.

**Keywords:** massively multi-user online role playing game (MMORPG), collaborative learning, e-learning, virtual reality environments, project based learning, problem based learning, games

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## Introduction

The Research into Professional Practice, Learning and Education (RIPPLE) research centre at Charles Sturt University have funded a project to develop, test and investigate the use of massively multiplayer online role playing games (MMORPGs) based on the authors’ existing work with virtual learning environments.

The research question overarching the project is:

Can a combination of computer supported collaborative learning (CSCL) and games design theories work in secondary teaching practice with a MMORPG?

## Project aims and significance

The aims and significance for all participants in this project is novel. At the end of the project:

- Students will have joined with another class curriculum to achieve joint learning outcomes by creating their own storyline (using game design theory), built and played in a MMORPG, and achieved new skills in learning collaboratively and using the ICT environment,
- Teachers will have new skills and enhanced teaching practices by joining collaborative learning and games design theories, across the subject boundaries of English and Computing curricula,
- Researchers will have investigated the effectiveness of the MMORPG scenario which used the theme of a “Medieval Castle” (part of the Year 8 English curriculum at the host school) had on collaborative learning of two classes.

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<http://www.ascilite.org.au/conferences/perth04/procs/eustace-poster.html>