Chapter III
Massively Multiplayer Online Role-Play Games for Learning

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ABSTRACT

This chapter explores whether massively multiplayer online role-play games (MMORPGs) can be used effectively to support learning and training communities. The chapter aims to propose that cross-disciplinary approaches to the study of game-based learning are needed to support better synthesis of our current understanding of the effectiveness of learning with games. The chapter therefore includes a brief literature review of online gaming research to date, taken from psychological and educational research perspectives. The chapter explores the main types of online games and highlights the main themes of research undertaken through a consideration of the use of online gaming in current learning and training contexts where online gaming is being used to support experiential and discovery learning approaches. This chapter indicates future directions for cross-disciplinary research approaches in this field and considers how collaborative learning could best be supported through this approach.

INTRODUCTION

By way of an introduction to the subject of online gaming, the chapter will explore the main types of online games and highlight the main themes of research undertaken through a consideration of the use of online gaming in current learning and training contexts where online gaming is being used to support experiential and discovery learning approaches. This chapter will indicate future directions for cross-disciplinary research approaches in this field and consider how collaborative learning could best be supported through this approach.

The use of MMORPGs in educational contexts is a relatively new research area; indeed the first online games have only become established in the last five to ten years, and for these reasons there are specific problems in terms of data collection and
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validation (Wood, Griffiths, & Eatough, 2004). In addition, it has been noted that the field requires analytical techniques and frameworks for evaluation, some of which are being developed (de Freitas & Oliver, 2005, 2006). However, it is envisaged that this field of inquiry is set to expand, and as such, applications of multiplayer online gaming may become more numerous over the next five years, producing a wider evidence-base of research and allowing for more effective evaluation and validation (Pelletier & Oliver, 2006).

While the numbers of online games used for training and education purposes are limited at present, many of those that are available tend to center on military contexts and requirements, due to the large associated development costs. However, beyond the growing number of military applications of online gaming for training, there are an increasing number of small-scale research-based experimental projects that also fall into this area of study (Lee, Eustace, Fellows, Bytheway, & Irving, 2005; McLaughlin, Kirkpatrick, Hirsch, & Maier, 2001; Jones et al., 2004). Although online gaming is a relatively new area of activity, its success at engaging large groups of remotely located users has meant that early research projects and military training organizations have already begun to use multiplayer online role-play gaming approaches as a means for engaging and retaining large remotely located learner groups, and for supporting collaborative learning objectives and ‘communities of practice’ (Wenger, 1998).

As the 1990s came to a close, a new generation of machines with increasingly sophisticated processing power began to replace the early 1990s’ consoles. However, an even more revolutionary development was also occurring involving the Internet as a gaming forum. New games emerged that enabled people to link up online to game...