Chapter 3.12
Massively Multiplayer Online Role-Play Games for Learning

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ABSTRACT

This chapter explores whether massively multi-player 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 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).

While there are clearly central issues emerging in the review of existing literature, particular challenges lie in the fact that single disciplinary perspectives have often precluded more interdisciplinary, cross-thematic approaches that lend better to opportunities for synthesis. This chapter brings together a review that combines literature from psychology and educational theory, and practice disciplinary perspectives in an attempt to problematize key issues emerging with respect to using online gaming in educational contexts. The second section of the chapter therefore provides a general review of what online gaming is, the third section provides a review of psychological perspectives on the literature of online gaming, and the fourth section introduces examples where online gaming is currently being used in educational and training contexts. The conclusions bring together the main themes and problems raised in the chapter.

The chapter aims to propose that cross-disciplinary approaches to the study of a game-based learning approach are needed to support better synthesis of our current understanding of the effectiveness of learning with games. The chapter will include a brief literature review of online gaming research taken from psychological and educational research perspectives. The chapter will explore a range of terms including the following: online gaming, standalone games, local and wide area games, massively multiplayer online role-playing games (MMORPG), and flow.

WHAT IS ONLINE GAMING?

Due to the rise of computer games as a leisure phenomenon, there has been increasing research into this area over the last few years (e.g., Bonk & Dennen, 2005; de Freitas, 2005; Dickey, 2003; Sandford, Ulicsak, Facer, & Rudd, 2005). Prior to 2003, a majority of the research had concentrated on adolescent players, and on the more negative aspects such as excessive play and addiction, the effects of playing aggressive games, and the medical and psychosocial consequences (Griffiths, 2005). However, there have been a few psychologically based studies on personality and computer game-play (e.g., Douse & McManus, 1993).

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