Chapter 3
MMORPGs in Support of Learning:
Current Trends and Future Uses

Bodi Anderson
Northern Arizona University, USA

ABSTRACT

This chapter provides an overview of current massively multiplayer online role-playing games (MMORPG) research and creates a conceptual framework for their use in support of learning. Initially, a definition of MMORPGs in education is considered in light of research to date. Here attention is paid to how MMORPGs differ from most video games in terms of types of player–game interaction, levels of player–player interaction, environments in which interaction occurs, and the ability for MMORPGs to tap into student motivation levels. Based on this definition and considering previous theoretical and empirical studies on MMORPGs from a variety of disciplines, including education, psychology, and linguistics, a conceptual framework for the use of MMORPGs in support of learning is created. Next an overview of current research trends in MMORPGs is examined, concluding with suggestions concerning future research of the use of MMORPGs in support of learning.

INTRODUCTION

Since the late 1990s, there has been a steady increase in the number of people who play online games. Massively multiplayer online role-playing games (or MMORPGs) are a $20-billion/year industry, with the top MMORPGs comprising between 11 (United States) and 20 million (Asia) players for a global market of over $9 billion dollars (Wauters, 2008; Wei 2007). Given the popularity of this medium, and the growing use of video games in support of various learning, it was not long before educators began using MMORPGs in instructional settings. Instructors from academic disciplines such as childhood education, communication technology, psychology, and computer-assisted language learning began to experimentally investigate the use of MMORPGs in instructional settings.

While an increasing number of teachers and educational institutions are making use of MMOR-
MMORPGs as an instructional medium, the amount of research on MMORPGs to date is still limited. The youth of this game genre and sudden boom of popularity are significant factors when considering the currently small, yet growing amount of research on MMORPGs (Au 2007; de Freitas & Griffiths, 2007). Research on MMORPGs comes from multiple academic genres such as psychology, sociology, education and, more recently, ESL (English as a Second Language) and applied linguistics. In their meta-analysis on education technology, Waxman, Lin, and Michko (2003), contest that there is a need for consolidation of education technology research in methodology and commonly accepted frameworks. They argue that much of the problem with education technology research stems from the numerous research methods and norms of the various academic disciplines with interest in distance education as well as ever-present changes in technology, which can serve to significantly impact education technology research in terms of the longevity of generalizable findings.

Naturally, each specific academic discipline is driven by different purposes, pedagogy, and field-specific theoretical issues. Likewise, each discipline has particular needs for both instructors and students. But because serious game studies represents a large body of research across many different academic disciplines, it is important to understand and study MMORPGs from an interdisciplinary perspective. This chapter will attempt to provide an outline of current MMORPG research from an interdisciplinary perspective. First, a definition of MMORPGs will be established, particularly with regard to current research of serious game theory and concepts. Once established, this definition will be used in conjunction with current research on MMORPGs in order to propose a conceptual framework for MMORPGs in support of learning. Here a focus will be placed on combining interdisciplinary research in order to make a general theoretical model, which may hopefully serve as a foundation for further research into the MMORPG medium. Following this, an overview will be given of current research trends in MMORPGs across disciplines, and finally, suggestions concerning future research in the medium will be proposed. It is hoped that by developing a foundational conceptual framework and providing an overview of MMORPG research to date that better planned and consolidated efforts for future research into the medium will be made.

**BACKGROUND**

In order to better understand modern day MMORPGs, this chapter will first look into the history and technological innovations of various types of games that served to shape and influence current MMORPGs. MMORPGs evolved out of online multi-user dungeons (MUDs), which were preceded by computer role-playing games (CRPGs) and, in turn, pencil and paper (PnP) role-playing games (RPGs) such as *Dungeons and Dragons* (D&D; Childress & Braswell, 2006). This becomes more clear when one breaks down the acronym in reverse: “RPG” stands for role-playing games, which were originally non-digital (PnP and D&D), “O” stands for online, which signifies the shift of the medium from analog to digital (primarily, CRPGs), and “MM” stands for massive multiplayer, signifying the shift from a small number of players to large numbers (MUDs).

In addition to being the first RPG, D&D is often heralded as the most popular PnP RPG of all time. First developed in 1974 by Gary Gygax and David Arneson, D&D went on to develop a huge following. Unlike most board and card games, RPGs center on social interaction (which often includes elements of player teamwork) rather than player-versus-player (PvP) competition alone (Rilstone, 1994). At their core, RPGs work much like stage drama with a bare-bones script with a high degree of improvisation. In RPGs, most players assume the identity of characters, or different personas, much in the manner that an
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